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The Newsletter For ATARI Owners

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XL/XE Reviews:

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Basic View
Micro League
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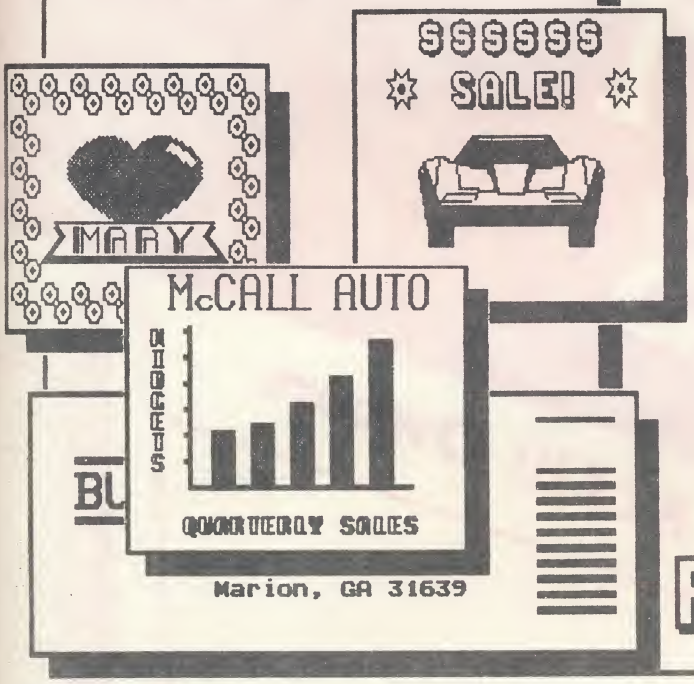

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EDITORIAL

This April issue marks the end of my second full year as editor of CURRENT NOTES. I am not quite sure of this month's circulation yet (I won't worry about that number until I get this issue off to the printer!) but it will be somewhere in the neighborhood of 2,400+ copies. That represents six times the print run we had back in May of 1984. That's a growth rate I can not imagine continuing. However, to be honest, looking at Atari's current prospects, I see nothing on the horizon that would slow down sales. I suspect we are going to keep growing for quite some time yet.

It seems like, from the day I started, I have anticipated that next month's issue would be easier. After two full years, I think this is the FIRST month when that anticipation was actually realized. It normally takes about 40 hours to put together an issue of CURRENT NOTES. I haven't timed this month's effort, but there was, indeed, a noticeable difference. YOU should notice the difference in the print you are now reading. It's not dot matrix. This issue was printed on the new QMS KISS laser printer. Not only is the print far easier to read, the time it takes to print pages was diminished considerably. For example, printing a draft of a three-page article took only 30 seconds and 30 QUIET seconds at that. Cutting out the constant clacking of a dot matrix printer has a wonderfully calming affect on one's nerves.

I had hoped that this would also be an all-Atari issue. However, there is still no word processor available for the ST that can handle the formatting requirements of this newsletter. The first two issues I did, I used AtariWriter (on my Atari 400). The May 1984 issue was done using a Centronics 739 printer. This printer allowed rolling pages back. Therefore, I was able to use AtariWriter's double-column mode directly. Unfortunately, the print quality of the Centronics was poor at best (mind you this is from a printer that costs $700 when it was first introduced) and for the June issue I switched to an Epson printer. The Epson print quality was better, but the Epson could not roll a page backwards. Therefore, I had to print all the columns in the appropriate width and then cut and paste to put the final product together. I decided that cutting and pasting was not an experience I wished to repeat.

Although AtariWriter could produce the double column output and would allow you to preview your output on the screen, it was very difficult to tell where the columns would break and it took a very long time (printing, checking, revising, and printing again) to make the final output acceptable. I needed more powerful tools, computer and software, if I didn't want to spend every spare minute working on a newsletter.

Therefore, with the July '84 issue I switched to a COMPAQ (an IBM-clone) and Microsoft WORD to produce the newsletter. Microsoft WORD has been revised several times since then and now represents one of the more powerful word processors available. Microsoft WORD has the ability to let users establish their own individual style sheets with individually tailored formatting commands. This makes the achievement of a consistent style throughout a paper very easy. With the exception of advertisements that are generally pasted in, every page you see in CURRENT NOTES is exactly as WORD formatted it and sent it to the printer.

The use of a more powerful computer also simplified the editing environment. I could work with an 80-column display and there was enough RAM to fully format a double-column page in memory before sending the output to a printer. This meant that the various printer's I've used over the past two years (Epson, Okidata, Panasonic, and now KISS) could print double-column output without having to roll the page backwards.

With the introduction of the Atari ST I thought we would finally have an Atari capable of handling this kind of job. We do. The ST has all the memory I need and it is every bit as fast as the IBM AT and considerably faster than a standard IBM PC or IBM XT. Last month I was able to transfer all my database files from a dBASE III environment on a PC to H&D Base running on the ST. Using only floppy disks, I was able to append the 8 individual club databases into one large 1,200 record file in just over 8 minutes. Once the big database was created, indexing it on last name only took about two and a half minutes. That's not bad.

So the ST has the power, but what it lacks, so far, is the software to compete with WORD. None of the many word processors currently available for the ST handle double column printing. AtariWriter does, but it has a bug in it when you try to format more than 80-characters across a line. Mark Williams has just released Let's Write. I was told that this program would handle double columns. Well, it might. But it has no double-column command. Doing double columns is going to require writing a sophisticated macro to achieve this result. Since the software arrived only a day before it was time to start putting together the April issue, I had to rely once more on my tried and true WORD program.

But there is hope. More sophisticated software is coming out every week. I fully expected that we will have a program on the ST that will give us all the formatting capabilities we need. All we have to do is be a little more patient. Perhaps next month....

As usualy, we are always looking for authors who would like to contribute their time and talents to CURRENT NOTES. We are getting more software in to review all the time and will need help doing these product evaluations. However, I am reluctant to pass out review copies to people who have never written anything before. (Individuals who do product reviews usually get to keep the software they are reviewing.) If you would like to help, try your hand at writing an article or a review. Establish a track record and become part of the growing list of CN contributors. If you think you can help, contact Jack Holtzhauer for XL/XE programs and Frank Sommers for ST programs.

TIPS'N'TRAPS

by Jim Stevenson and
Barry Burke - NOVATARI

Hello, again! Well, here we go with another Tips 'N' Traps column. It's been a pretty big success. The message bases on ARMUDIC 569-8305, and JOE'S ATTIC 471-1809 have been used to their fullest capacity, and are still growing. Keep up the good work adventurers! Jim Stevenson (703)378-4093 and Barry Burke (703)830-1978.

ZORK 1

Q. How do you get the thief's bag away from him? I already tried "STEAL" but it didn't work. Also, how do you get past the grating?

-"The MADD HACKER"

A. He won't give it up as long as he is alive. Your best chance of killing him is to catch him at home, but don't be in too big a hurry to find it. To open the grate you just unlock it with the key. Of course, you have to be on the side where the lock is.

-Paul Mattia

ULTIMA III

Q. Which dungeons have which marks of which level of the dungeon?

-"The MADD HACKER"

A. You want to know on which levels of which Ultima III dungeons he can find the "marks". There are four marks: kings, fire, force, and snake. As one might expect, they are generally found on the lowest level! As to which is where, I'm not sure.

-Richard Gunter

A.

DUNGEON	LEVEL	MARKS
Mines of Morinia	8	king & fire
Island	8	snake & ?
East of Capital	1	king
" " "	8	king & fire
Lava	8	force & fire
Stargate	8	? & ?
Dark	8	force

-Richard Smart

SPELLBREAKER

Q. How do I get the cube from the hermit's cave?

-Barry Burke

A. To get past the part with the hermit think about the house ... what do you notice about it? It sure seems imperfect ... maybe it should be perfected.

-SysOp of ARMUDIC

Q. Ok, I can't get past the ogre or the serpent. Gimme a hand. Please?

-Dan Greenblatt

Q. Ok, I am finally really getting somewhere in the game ... I have gotten 340 points ... now I have a few problems once more for you to help me on ... first, what is the octogonal room for? Is the iron key helpful there? How do I get past the guard? Can I? And what do I use the change shape spell for? Oh, can I do anything with the baby chick? When it hatches, I feed it fish but it will still eat me.

-SysOp of ARMUDIC

KING'S QUEST II

Q. I have 54 points. Have the mallet, stake, brooch, cape, ring, bird, etc. ... How do I get across the poisoned lake to the castle? How do I summon the mermaid (saw her on the box). How do I get in the antique shop?

-Barry Burke

WISHBRINGER

Q. Does anyone know where the Magick Shoppe is? I've mapped the town and now I'm stuck!!!

-"Xorconn"

A. Have you gotten to that bridge that leads across the river? Well, in case you haven't, it's just north of the town, you go across the bridge, then you go the only direction you can go east, then you merly climb the cliff's path. But a word of warning map the way you go as you climb the path, because you'll need it to climb back down safely!

-"Munchkin"

HITCHHIKER'S GUIDE TO THE GALAXY

Q. Does anyone know how to get the Bable fish so you can hear what the Vogons are saying? Also when you get sucked out into space you go into another DARK room, how do you get past this one?

-Steve Smiroldo

A. Getting that fish is probably the hardest thing in that game. IT drove me nuts. Ok. You probably figured out the first two or three things to cover. (Satchel over panel, towel over drain, etc.) then throw the junk mail in the air and push the button. I think that's it, anyway. For the dark, just type "L" untill one of the 5 senses (like smell the 1st time) is missing and type that smell in. I think it's random.

-"Barracks Rat"

Q. This program is about to drive me crazy. I could use some professional help but will take any help I can get. Marvin always wants a tool that I don't have. How do I get the right tool. I can't find the tool I dream about anywhere.

-Alan Grogan

A. Well, all I can tell you is to get everything you see because you never know what you will need. There's at least one tool in every scenario. Including the first place. Your bedroom. Remember the screwdriver? Anyway, all I can say is to save the game before you grow the tree and keep at it until you have the tool that he wants.

-Barry Burke

HACKER

Q. I am going crazy trying to get the level 2 & 3 passwords. Is there a logical way to figure them out?

-David Moyer

A.

LEVEL	PASSWORD
-2-	AX-0310479
-3-	HYDRAULIC
-4-	AUSTRALIA

-Jim Stevenson

ATARI SCUTTLEBITS

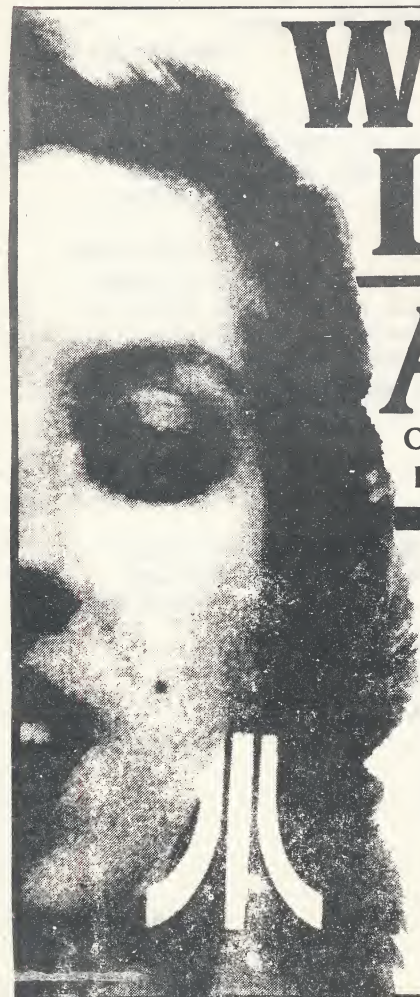
by Bob Kelly

This month's column was drawn from information obtained on a trip to North Asia. Kung Hei Fat Choy! In English - Wishing You a Prosperous Chinese New Year which this year was in February (better late than never). As I was writing this piece, I was looking over beautiful Hong Kong Harbor from a friend's apartment near the top of Victoria Peak. The view was terrific and for more than a moment I gave serious consideration to being CURRENT NOTES' first foreign correspondent. In any case, you are probably asking, "What's in Hong Kong that would be of interest to the readers of CURRENT NOTES?" The answer to this question is, naturally, a discussion of the availability of those extremely cheap Apple/IBM look-alike computers you have heard rumors about.

There is a central location in Hong Kong where the discount computers are sold. The concept of one central district for a specific consumer item is not new to Asia. In fact, most Asian cities have separate districts where one goes to buy shoes, clothing, leather goods, cameras, etc. Let me add, if you are not aware, that in general the variety and low prices are what make Hong Kong a shoppers' paradise. This situation holds equally as well for many computer products. The central location for the discount computer dealers is a large building located about 10 minutes from downtown Hong Kong. The building contains several hundred computer stores selling a wide variety of hardware, software, and accessories. To get there, all you have to do is ride the fast, clean subway to Sham Shui Po Station (exit Fuk Wah Street). As you are about to exit the station, you will be immediately struck by the scene ..... hundreds of vendors selling various prepared food items from the mundane to the most exotic delicacy, e.g. noodle soup to snake. Upon leaving the subway station, walk about 100 feet past the food vendors to the GOLDEN Building. You are now at computer mecca.

For me to say that bargains are readily available is an understatement. To illustrate, let's look at a few examples. Say you are in the market for a computer completely compatible with the Apple IIe having 128K, 80-column board, built-in numeric key pad, lower case capability, and several other goodies. What do you think the price might be? How about 500 U.S. dollars? Sound good? Then how does $145 go down? Yes! I said $145. Further, if you are a good bargainer, you could get a couple of pieces of software thrown-in. The fully loaded Apple IIe clone plus disk drive and monitor could be purchased for less than $300 dollars.

So you don't like Apple, let's consider an IBM clone. The IBM look-alikes are absolutely compatible as far as I could determine. I tested them with Lotus 1,2,3 and Symphony and encountered no difficulties whatsoever. What do you think a PC-XT would cost with 512K, RGB board, 2 DS/DD disk drives, keyboard, power supply, and a few other minor goodies? You say $795 would be a real good price. Well, how does $450 sound? How about any disk drive you can imagine for less than $80 or 1200 baud modems that are supposed to be Bell and Hayes compatible for under $100. I say "suppose" in regard to the modems since I had no way of verifying the claims of the dealers as to their compatibility with U.S. standards.



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You want software to go with these machines? Any piece of software you may want for Apple or IBM can be had for less than $10 including complete documentation. I am talking about Symphony, DataBase III, Wordstar 2000, etc. Games sell for even less on average. Needless to say, these are all pirated copies. The documentation is printed in Taiwan in book form and looks like what you would see at your local U.S. bookstore.

Relatively little is available for the Atari. I saw old 800XLs which were selling in the range of $100. This is 30% higher than prices in the States. The 8-bit software selection for Atari was more or less up-to-date and sold in the range of $3 to 5 dollars for any program desired. If I was a U.S. software developer, I would really be disturbed about the software situation and the attitude of local authorities. Finally, there are no ST look-alikes available but that will probably change as the popularity of the ST grows in the U.S.

The final topic I would like to discuss this month relates to investment software. Batteries Included (BI) has come out, for the IBM family of computers, with a terrific piece of software called the Isgur Portfolio System (IPS). The program is designed for personal portfolio management. IPS was reviewed in the February 24, 1986 issue of InfoWorld and received a four star rating. Batteries, as a corporate entity, has been on a roll for the last 1 1/2 years and has to be considered one of the hot software houses in the industry. I thought it would be a major indicator of market intentions by software firms regarding ST business program development if a version of this program was contemplated for the Atari. I called Mike Reichmann, Vice President at BI, to inquire of their plans.

I can't really express how elated I was by his answer. The ISP investment analysis program is being Beta tested right now for the Atari ST. It is scheduled for commercial release shortly after COMDEX at the end of April. The release date is dependent upon solving an apparent problem with the ST ROM chip just released by Atari.

Mr. Reichmann's unbounded enthusiasm for the Atari ST came as a complete surprise. He pointed out that BI has 10 major products under development for the Atari ST, all of which are scheduled for release no later than mid-summer. Some of the new programs are: PAPER CLIP ELITE - a high-end word processor plus a real time spelling checker and outline processor (a real time spelling checker is RAM resident and is so fast it can check the words as typed if so desired), TALK - a major telecommunications product (available real soon), HOMEPAC - similar to the program available for the 8 bit computers, various RAM resident desk type accessories, etc. It sounds exciting especially since these will all be business or productivity programs designed to serve the professional at home or in the small business environment.

See you next month and I will have some more to say about new software products of interest to ST owners. DON'T FORGET TO SEND IN YOUR SURVEY IF YOU HAVE NOT DONE SO ALREADY. Another copy of the form can be found on page 44 of this issue.

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BATTLE BYTES:

by M. Evan Brooks and
Greg Black -- NOVATARI

N A M
[Strategic Simulations, Inc., $39.95]

Last month, "Battle Bytes" gave an in in-depth review to CONFLICT IN VIETNAM; this month, NAM. Can someone spot a trend in the making? Now that American involvement in southeast Asia is socially acceptable in historical terms, one can expect more treatments of the subject. This reviewer is still awaiting the campaign treatment with four different sets of victory conditions -- American, North Vietnamese, National Liberation Front/Viet Cong (NLF/VC), and South Vietnamese. Of course, that will require the sixteen-bit computers.

But in the meantime, SSI has released NAM by Roger Damon and Jeff Johnson. This solitaire simulation (one can only play as the US/ARVN [Army Republic of Vietnam]) is described as "a tactical wargame of U.S. and Allied forces in Vietnam" for introductory and intermediate players. To anyone familiar with Mr. Damon's prior designs (OPERATION WHIRLWIND, FIELD OF FIRE, PANZER GRENADIER), NAM will be familiar -- in fact, overly so for reasons which will be covered infra.

Six scenarios cover search and destroy missions in jungle and tunnel environs as well as an armor confrontation and street clearing during the Tet Offensive (1968) in Hue. Despite the publicity announcements for NAM which stated that the player commands squads of U.S. Marines, most scenarios offer the player command of army units (yes, there is a difference!). Different scenarios offer American, ARVN and ROK (Republic of Korea [South]) infantry, artillery, airborne, marine, ranger and air cav; the computer controls the NVA/VC. Except for the scenario descriptions, one is unsure exactly which enemy will be encountered.

Three levels of play difficulty and historical/non-historical enemy deployment are offered. Given the ahistorical situation generally facing the player, it is suggested that both be tried. The player may enjoy the simulation, although he will not learn anything pertaining to actual ground combat in southeast Asia.

Game length varies from ten to forty turns, with the clearing operations lasting the longest. Each hex is c. fifty (50) meters, and no time scale is delineated.

The reviewers were eager to play this simulation because of the potential for helicopter employment in small unit actions. As the documentation notes, "the advent of the helicopter revolutionized mobile warfare". Finally, a chance to command something other than the usual armor/infantry unit; however, the command is less than inspiring. Helicopters are limited in their movement rates by an unrealistic scale. While airmobile assets are not restricted by terrain, they are limited to 32 movement points per turn (by comparison, dismounted infantry can move 8 hexes in clear terrain; trucks, 24; and armor, 10). Thus, helicopters move a maximum of 1600 m. -- only eight times faster than "straight leg" infantry. Assuming a game turn of 2-5 minutes (which is usual with games of this distance scale), with more emphasis on the longer turn, this means that infantry is moving at c. 3 mph while the air assets are moving at c. 12 mph. Discussions with combat pilots have revealed that helicopters usually "loaf" at c. 40-60 mph, and once enemy fire is received, speeds quickly achieve 90-102 mph or greater. Thus, NAM has created a helicopter only marginally more effective than a truck -- and given the importance placed upon air mobility and firepower, the helicopter is "not worth a flying truck". If the helicopter "revolutionized" mobile warfare, than NAM conclusively proves why Saigon is now Ho Chi Minh City.

In two scenarios, any remaining enemy forces will result in a "Questionable Victory". However, status messages at each turn's end can be misleading. Often, the American player will have a decisive victory until the final turn and suddenly, the end result will be a "Questionable Victory". It would have been nice to have the "missing" units visible in an after-action mode so that the player could evaluate his play.

The tunnel scenario (TUY HOA: INTO THE UNDERGROUND) has a serious flaw. When enemy units are discovered, they become vulnerable to chopper and mortar fire, but not artillery fire. By any realistic standard, all such fires should be ineffective. While American fire support was usually accurate, it was NOT that accurate!

The strategy of concentrated firepower must be balanced by "chipping away" at enemy strength, depending upon the particular tactical situation. Often, "digging in" is more effective than maneuver (and safer too!).

The historical scenarios are usually detailed adequately, but some scenarios are clearly bogus. IA DRANG: DEATH FROM THE AIR covers the employment of the First Air Cav Division in 1965; the map is mostly jungle with a road passing through the center via the village of Ia Drang. Since "Ia" means river in Vietnamese, the name of the village is River Drang. But there was no such village. The Ia Drang Valley was a generally isolated valley with little population. The scenario bears no relation to history!

But all in all, NAM is an introductory game. Can one play it and receive an enjoyable gaming experience? The answer has to be a qualified yes; but if one wishes to achieve a better understanding of the Vietnam Conflict, NAM is totally unsatisfactory.

The simulation simply does not simulate warfare in Vietnam. Without the documentation and the obvious helicopter (which is tactically useless), one would be hard pressed to determine which war was being simulated. Thus, although SSI was the first computer company to produce a Vietnam simulation, they were also the first company to fail at such a simulation.

NAM: Overall recommendation: * *

SCUTTLEBUTT: SSI's USAAF (bomber offensive over Germany, 1943-45) should be released by this time; ANTIETAM has been released (review forthcoming).

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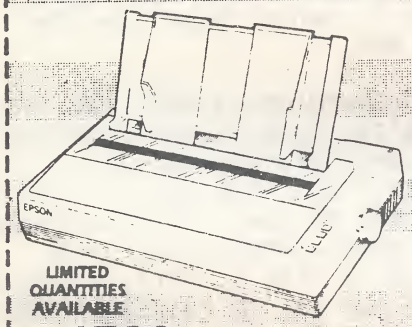

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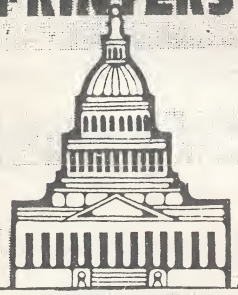

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ATARI'S SMALL MIRACLES

by Mark A. Brown - NOVATARI

Welcome back to Atari's Small Miracles, the column written for the slow and/or lazy typists in this world. Here, programs are written short enough so anybody can type them in! There are fun programs, useful programs, strange programs, and learning programs. A little for everybody will appear in these pages.

This month's theme is the player/missile graphics features the Atari computer can use. There are four quick programs to help you exploit this feature to its fullest!

I won't even try to explain player/missile graphics here, I'll simply refer you to the many articles and books written about them. You won't have to look too hard to find some. Compute! publishing has put out literally dozens of good tutorials, ANALOG has put out a few, and so on. Almost every magazine that carries Atari will have covered player/missile graphics at some point.

PMEDITOR

The first program this month is used to help you create and change player/missile graphics. Type it in, run it, and you can work with any shape you want. The image can be eight pixels wide (obviously) and twenty-four lines high.

Use the arrow keys without the control key to move your cursor about (i.e. the "-", "+", "=", and "*" keys move you). Press the space bar to turn on the pixel the cursor is sitting on, unless it was already on in which case the space bar will flip it off. Note that the numbers to the right of the editing area are the decimal numbers of the data you have in the player.

If you don't like the player you are creating, you can strike the CLEAR key to erase it and start over. On the other hand, if you like your player, press the ESCape key to quit and a DATA statement will appear with the numbers needed to re-create that image. You can use it in PMMOVER, below, or in a program of your own.

```
10 GRAPHICS 0:POKE 752,1:DIM A$(2048):
Z=INT(ADR(A$)/1024)*1024:Z=Z+1024*(Z<A
DR(A$)):POKE 54279,Z/256:POKE 704,15
20 POKE 53277,3:POKE 559,46:POKE 53248
,160:A$=CHR$(0):A$(2048)=CHR$(0):A$(2)
=A$:FOR A=0 TO 23:POSITION 10,A
30 ? 0;:NEXT A:S=PEEK(88)+256*PEEK(89)
:X=1:Y=1:OPEN #1,4,0,"K":POSITION 17,0
:X=1:Y=0:? "<+-=*>  Moves cursor"
40 POSITION 17,1:? "<SPACE> marks pixe
ls":POSITION 17,2:? "<CLEAR> clears pl
ayer":POSITION 17,3:? "<ESC>   Ends"
50 D=Y*40+X+S:E=PEEK(D):POKE D,E+128:G
ET #1,B:POKE D,E:X=X+(B=42)-(B=43):Y=Y
+(B=61)-(B=45):X=X+8*(X=0)-8*(X=9)
60 Y=Y-24*(Y=24)+24*(Y=-1):IF B=125 OR
B=60 THEN RUN
70 IF B=27 THEN ? CHR$(125):? "1000 DA
TA ";:FOR A=0 TO 23:? PEEK(Z+560+A);",
";:NEXT A:? CHR$(126):END
80 IF B<>32 THEN GOTO 50
90 A=Z+560+Y:POKE A,PEEK(A)+(2^(8-X)*(
E=0))-(2^(8-X)*(E<>0)):POSITION 10,Y:?
 PEEK(A);"  ";:POKE D,3*(E=0):GOTO 50
```

PMMOVER

This program is largely instructive, and serves little purpose on its own. It simply takes a player, pokes some data into it, then moves it around at your joystick's command. That is all.

What it IS meant to do is show an easy way to vertically move players and missiles, through the technique of strings. This is a fairly simple idea that works quite well for small applications. Study the program for a while to fully comprehend it, and don't forget to notice the zeros at the beginning and end of the player data. Those make sure the player won't leave a stripe of data behind it. Replace them with some other number to see what I mean.

```
10 POKE 82,0:GRAPHICS 19:POKE 752,1:DI
MA$(2048),P$(24),S(15,2):Z=INT(ADR(A$)
/1024)*1024:Z=Z+1024*(Z<ADR(A$))
20 POKE 54279,Z/256:POKE 704,15:POKE 5
3277,3:POKE 559,46:PS=Z-ADR(A$)+512:A$
=CHR$(0):A$(2048)=CHR$(0):A$(2)=A$
30 FOR Z=5 TO 15:READ X,Y:S(Z,1)=X:S(Z
,2)=Y:NEXT Z:FOR Z=1 TO 24:READ X:P$(Z
,Z)=CHR$(X):NEXT Z:X=128:Y=64
40 POKE 53248,X:A$(PS+Y,PS+Y+23)=P$:Z=
STICK(0):X=X+S(Z,1):Y=Y+S(Z,2):X=X+256
*(X<0)-256*(X>255)
50 Y=Y+128*(Y<0)-128*(Y>127):GOTO 40:D
ATA 1,1,1,-1,1,0,0,0,-1,1,-1,-1,-1,0,0
,0,0,1,0,-1,0,0
60 DATA 0,129,66,36,24,24,36,66,129,66
,36,24,24,36,66,129,66,36,24,24,36,66,
129,0
```

PLAYER5

One of the seldom used features of player/missile graphics is the fifth player option. Simply put, turning on bit 4 of location 623 (GPRIOR) turns all the missiles into one color to let them look like a fifth player if put together. PLAYER5 takes care of the tedium of that process, i.e. the continous poking of the four missiles to put them next to each other. POKE the horizontal position of the fifth player into location 256 and PLAYER5 will automatically move all four missiles to their appropriate places to simulate a single player.

Remember that bit 4 of GPRIOR must be on and that the color of the player is controlled by location 711.

```
10 FOR A=256 TO 285:READ B:POKE A,B:NE
XT A:A=USR(256):POKE 256,128:POKE 5326
5,255:POKE 623,16
20 DATA 234,104,162,1,160,11,169,6,76,
92,228,173,0,1,160,0,153,4,208,24,105,
2,200,192,4,144,245,76,95,228
```

VMOVER

And finally a program to suit those of you who couldn't understand PMMOVER. This program is a machine language player/missile graphics mover that will take any player and move it any number of bytes up or down. To do this, in your program code the following:

```
JUNK=USR(ADR(A$),PMADR,DIRNO)
```

where PMADR is the address of the player you want moved and DIRNO is the number of bytes you want your player moved down (to go up, subtract the number of lines you want it to go up from 256; for example, to move up one line you would put 256-1 or 255 into DIRNO). And that is all. Your player will be quickly moved to that position. It doesn't matter if it's in single line or double line resolution, VMOVER will adjust automatically.

```
10 DIM A$(67):FOR A=1 TO 67:READ B:A$(
A,A)=CHR$(B):NEXT A:DATA 104,104,133,2
13,104,133,212,104,104,133,215,160
20 DATA 255,173,47,2,41,16,208,2,160,1
27,132,214,160,0,132,216,177,212,72,15
2,24,101,215,37,214,168,177,212,170
30 DATA 104,145,212,196,216,240,5,138,
230,217,208,233,200,165,217,197,214,24
0,6,230,217,208,218,208,216,96
```

Atari's Small Miracles is a column that needs a regular source of small, quality programs, and that source is the readers, you! If you have any good ideas or programs, send them to:

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If they're less then ten lines and if they're good enough you'll see your name here! See you next month!

HUMILITY AND THE COMPUTER USER
by John Barnes

One lesson that many of us learned back in the early 1960's was that humility was a prerequisite for successful programming when using the machines of the time. This lesson seems just as valid today, although in more subtle forms. I have recently been reminded of this in trying to help a couple of people new to computers. Humility in computing means the user adopting a mind set in which the user assumes the responsibility for any mistakes that crop up rather than blaming the machine.

Too many people expect the machine to do what they want it do rather than what they told it to do. While today's systems are much more approachable than the early ones, they have still not been trained to read the human mind. Their linguistic abilities are, in fact somewhere below the level of the ape who reads sign language and it is this limitation that forces the user to put on a cloak of humility.

Unfortunately computers cannot be punished, as dogs or small children can. Nor are they innately anxious to please. They also have no concept of reward. Indeed, it seems that computers tame users rather than the other way around. The user must submit to the discipline of learning which keystrokes, joystick movements, mouse tracks, or button pushes cause the computer to do what the user wants done. I claim that submission to this discipline is an act of humility on the same order as that practiced by a monk or a nun.

That such a discipline existed was pretty obvious back in the days when we punched tiny holes in pieces of cardboard in order to feed long strings of instructions to the computer. It was worth it to spend 10 minutes or so to list the program (or the data) and check for misspellings, syntax errors, and the like. The computer, after all, was going to take 45 minutes or so to tell us what it didn't like.

Nowadays our syntax errors are spit back in our faces immediately. The diagnostic messages from our errors may be obscure, but they are trying to tell us something -- if we would only take the trouble to understand. We have to humbly accept the fact that we made a mistake and attempt to correct it.

Our logic errors, however, quietly propagate through our spreadsheets to pop up innocently as wrong numbers on our tax returns. All of us are familiar with the idea of "Garbage in, Garbage out", but we must be humble enough to recognize that we ourselves put the garbage there in the first place and that it is up to us to remove it.

The lessons of computer humility are, therefore, these: (1) read the manual, (2) analyze what you are doing, (3) do what you are supposed to do, (4) correct the mistakes the computer has found, (5) treat your results as garbage until you are sure they are gold, and (6) "Pride goeth before the fall".

B/GRAPH: A POWERFUL GRAPHICS-CHARTING AND ANALYSIS PROGRAM
Reviewed by
Dennis McCormick - NOVATARI

B/GRAPH is a powerful, easy-to-use, well-documented program for producing professional-looking charts and graphs. In addition, a quality statistical analysis package is integrated into B/GRAPH. This program should prove useful to those needing business graphics as well as students, educators and homeowners seeking a fast and flexible means of displaying and analysing data.

B/GRAPH consists of a number of (protected) BASIC program modules contained on two disks. The program is menu driven and to the extent possible, keystrokes and menu options are the same in all modules. On bootup, the user is asked to select a printer type. Printers supported include: Centronics, Epson/Gemini, C. Itoh/NEC, Seikosha AT/100, Okidata 92, and Epson FX. (My Panasonic 1091 works fine as an "Epson/Gemini.") The main menu permits selection from ten choices:

1. Reset Printer
2. Graphics
3. Pie Charts
4. Graph Imaging/Labeling
5. File Manipulation
6. Statistical Analysis
7. Regression Analysis
8. Correlation Analysis
9. Chi-square set up
10. Mini-DOS Functions
11. Enhancement Disk

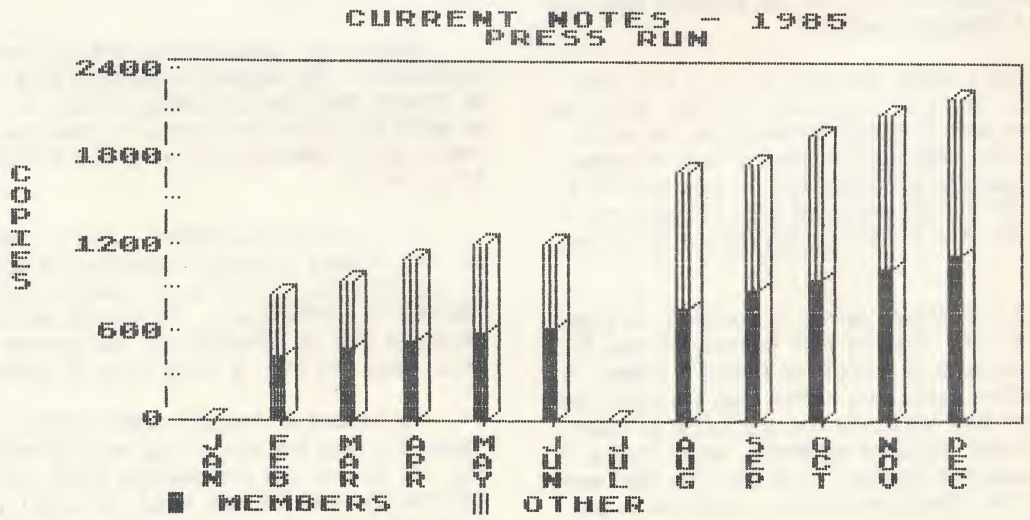
Selection 2 loads the primary graphing module of B/GRAPH. Using this module, a wide variety of charts and graphs can be produced, including: bar graphs, scatter (point) charts, line graphs, and market graphs showing high/low/close data. Two sample graphs are included here. The stacked bar chart shows the growth in the total circulation of CURRENT NOTES last year. The pie chart shows the distribution of WAACE by individual member clubs as of December, 1985.

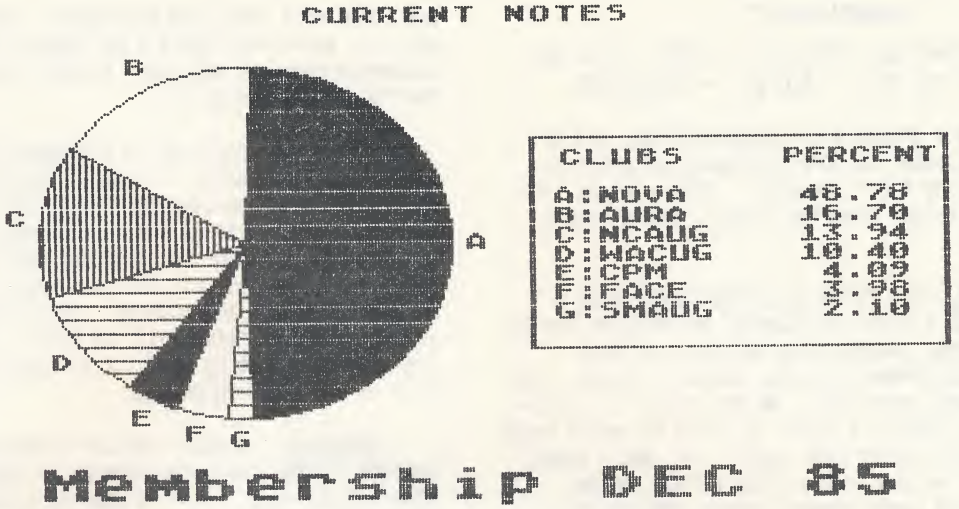
Functions which may be selected from the graphing menu are:

Create a new graph
Update current file
Display a data file (load)
Redisplay current graph
Save graph data to disk
Image current graph to disk
Alter graph labels
Exit to program selection menu

After selecting "C" for create, a series of prompts is presented asking for the various titles and labels. The form of the horizontal (X) axis (months, years, or simply units) is specified at this time also. Then the user is presented with a tabular form on which to enter the vertical (Y-axis) data. Entry is easy because the X-axis series (1,2,3,... or Jan, Feb, Mar,...) is listed down the left side of the screen. Further, the data are entered in a friendly and flexible manner. Data may be entered from DIF files created by Synfile+, VisiCalc, and Syncalc or directly from disk files created by a user's program.

Following data entry, the real power of B/GRAPH now becomes evident. At this point, the user can display all manner of graphs and customize their presentation without reentering the data (and in most cases, without leaving this program module). In short, this program offers a parallel with word processing: first enter the data, and then (in a separate process), format and produce the output. In addition, any and all entries may be altered or edited at any time in this process. Titles may be changed, data may be altered or updated, and there is complete flexibility to switch from one chart type to another with a single keystroke. Using the function keys, one can switch between viewing the graph, viewing the data in tabular form, and viewing the menu. The lower half of





the menu screen reminds the use of the options and modifications available while the graph is displayed. These include the ability to print the displayed graph (START key), adjust all colors, fill the area under line graphs, add grids, and attach points on a scatter chart. Displays are automatically scaled to fit available screen space, however users may rescale either axis. Pie charts require entry to another program module, however data saved in one module may be used by another without modification. (Of course, some data will not make sense in a pie chart.)

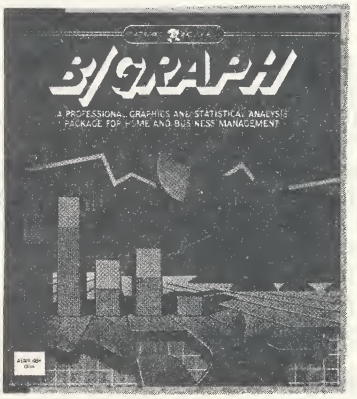
Data storage is very flexible. The Save command stores the data and most of the custom features added by the user. This is a very efficient format which only occupies a few sectors for typical graphs. Graphs stored using the Save command may be reloaded using the Display command. Graphs may also be saved as screen dumps using the Image command. The storage format occupies 66 sectors. Multiple graphs stored in this format may be retrieved and displayed as a "Slide Show" by the Imaging/Labling module of B/GRAPH. Such images may also be retrieved for custom labeling by the same module. Such labels can be added at any point on the graph using four font sizes, three colors and any of the several fonts on the B/GRAPH disk. In addition to labels, one graph may be placed over another, allowing graph types and/or scales to be mixed.

The Statistical module may be used to determine standard statistical parameters of data sets. Further, T-, F-, and Chi square statistical tests can be performed. Normal, Poisson, and Binomial distribution functions may be analysed.

The Regression module permits the drawing of a smooth curve through data points. The form of the equation underlying the data is entered and the regression program adjusts the the equation's coefficients for the best fit to the data points. For example, a quadratic curve y = ax + b can be used to fit a set of data. B/GRAPH will adjust the values for a and b to achieve the best fit. Both the points and the smooth curve are then plotted. If you are not sure of the form of the equation, several forms can be tried in rapid succession. Of course, any equation which can be expressed in Atari BASIC can be plotted.

B/GRAPH is designed for time series data. That is, the program is set up to handle evenly spaced points on the horizontal axis. Missing points can be accomodated and if desired, estimated. The program can handle a scatter plot (xy pairs not evenly spaced) but the full features are not available in this case. One other drawback for some kinds of data--B/GRAPH cannot directly produce logarithmic scales. (These are useful when working with data that vary several orders of magnitude.) One can, however, convert the data to log form using the built-in math functions in B/GRAPH and relabel the vertical axis to produce the needed plot.

In sum, B/GRAPH is a powerful tool. It is well-designed to be user friendly and convenient to use. It is well documented and includes an excellent tutorial. I recommend it without reservation to those who require graphics, projections and/or statistical data analyses.



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RAMBRANDT

By ATARI Design Studio, Disk, $19.95
Reviewed by Bill Agler - WACUG

RAMbrandt is a graphics art program (Disk, $19.95) touted by the publisher as "the most powerful graphics arts program for any 8-bit computer." With a claim like that how can one resist checking it out. Let's take a look.

Computer Art. For those of us who cannot draw a straight line with a ruler, a computer art program can be a fascinating thing. Suddenly we can draw not only straight lines but perfect circles, boxes, ellipses, diagonal lines and much, much more. We can create a rainbow of colors, change them on a whim, or erase the whole thing with a keystroke and start over again. Or, and I almost hate to admit it, we can take a picture from another source, such as the users' group library, modify it to suit our own needs, then try to pass it off as our own. RAMbrandt allows you to do these things, with more options, than any of the previous programs with which I am familiar. These include Micropainter, Visualizer, Koalapainter and Paint.

Documentation. The Rambrandt program comes with two disks. Side one contains the program. Side two contains the documentation in six Atariwriter text files. This prints out to 20 pages of text. It does describe all the functions but is minimally adequate for such a powerful, feature packed program. Side three is a utility disk and side four contains RAMbrandt pictures.

Hardware. This program requires an Atari 800 (48K), 800XL or 130XE. It also supports the 800 Mosaic Ramselect board. I used an 800XL. It will support only one disk drive. Printers supported include the Epson MX80 (and compatibles), C.Itoh and Okimate 10. According to *Antic Magazine* this "is the only Atari graphics software you can buy that is compatible with the inexpensive Okimate 10 color printer. I used a Panasonic 1090 without problem. The documentation indicates that future versions will support other printers.

Getting Started. After the program disk is booted and the program STARTed, you are presented with an opening screen asking you to select the graphics mode and type of touch pad. There are 5 different RAMbrandt modes that equate to Atari modes 7+16, 9, 10, 11 and 15+16. The different modes have different color possibilities and resolutions. The choice of touch pad is either Koala or Atari. A convenient option here is that both the joystick and touchpad can be used, the joystick in port 1 and the touch pad in port 2 on an 800XL. You switch back and forth with keyboard entries.

After making initial selections, you press <START> and the drawing screen appears. At the top of the screen is a bar showing the different colors available to you and the color and pattern that is currently in the "brush". At the bottom of the screen is the command box with 18 three-letter abbreviations of functions and two numbers that represent the coordinates of the current cursor location. By choosing <NXT> with the cursor in the command box, nine more functions are shown. The color bar, command box and cursor can all be toggled on and off the screen by keyboard entries. A three screen help menu is available by pressing "?".

In the documentation is a command summary sheet which lists some 80 commands that can be used in this program. While that may seem overwhelming (which it certainly was to me), the basic tools are easy to use. These are similar to other graphics art programs and allow you to draw squares, rectangles, circles, ellipses, lines, and points or erase the last thing drawn. You can also print text, in four sizes and five built in fonts. You can save and load your pictures to disk. I'll spend most of my time here on the other functions.

Animation. A small region in the upper left hand portion of the screen can be made to appear as if motion were taking place. This is done by selecting the part of your picture you want to animate, defining a "window" over it, and then using the window to take up to 32 "pictures" of it to be used as frames in the animation.

Brushes. There are 5 pre-defined brushes used for painting on the screen. But you can redefine them to suit your own needs. This is done by pressing "shift M" and then plotting up to 20 points on the screen. By pressing "shift E", then a number from 1 to 5, your newly designed brush will replace one of the pre-defined brushes. You can also save your newly defined brushes to disk along with your picture. However, using the normal save command only allows you to save one set of brushes per disk. The DOS utilities described below can be used to save up to 64 on a disk.

Colors. An amazing number of options! You can change any of the available colors by selecting <Chg> from the command box or pressing "C" on the keyboard. This causes the cursor to jump up to the color bar where you place it on the color you want changed. You then press the joystick button and move the stick left or right to change luminance and up or down to change hue. You then press the button again to lock in that color and the escape key to get back to painting. I have one hint to pass on here. The sequence "C + button + stick + button + escape" to change a color cannot be be done as rapidly as you can actually push the buttons/keys. I had a hard time with this until I turned the sound up on my monitor and realized that there is a slight delay from the time you push the joystick button until a faint click is heard on the speaker indicating that the signal is actually received. I recommend listening for that click.

Other color options. The program allows the creation of random textures for filling, drawing, etc. Another option is color "hunt" where, upon selecting a particular color, you can only draw, plot, etc. on that one color. You can even use "display list interrupts" to display a very large number of colors on the screen at once. I got up to about 20 colors before I quit. The documentation says 90 colors is the max and *Antic Magazine* says 128 colors are possible.

Patterns. There are checked, quilted, striped and tiled patterns which are pre-defined or may be user defined. All user defined patterns can be saved to disk in place of the pre-defined patterns. You can even use a letter as a pattern and can, for example, fill a circle with repetitions of your initial. As a hint here, the "zoom" or magnify feature comes in handy in defining your own tile pattern because each tile is quite small.

Picture Manipulation. In additon to loading and saving pictures to disk, if you have a 130XE or 800 with Mosaic 64K Select board you can transfer pictures to the extra memory (8 pictures for 130XE, 10 for Mosaic), according to the documentation. You can then work on more than one at a time and move parts of one to another. I did not have the hardware to check this out. You can also shift portions of your picture if they are not properly centered, but this is of limited use since you can only make the movement towards the upper left hand corner of the screen. I did find this to work.

Other picture manipulation which I found very useful was the ability to scale part of your picture, reproducing it either bigger or smaller on the screen. Another option I really liked was the rubber stamp option which allows you to grab a piece of your picture and reproduce it anywhere on the screen. With this option you can actually grab up to three small or one large piece and save it for later stamping, or use on another picture if you have a ramdisk.

Windows. By selecting the <Wnd> option you draw a rectangular window over any part of the picture you want. You can then rotate what is in the window, vertically flip it, horizontally flip it or wipe it with the color currently in the brush. By using the color hunt option described earlier, with the wipe option you can selectively remove colors from your picture.

Printing. There are three black and white print dumps available. The Epson fast dump prints out your picture in about a minute and a half on my Panasonic 1090, taking up about one fourth of a page with very little shading of greys. The Epson or C.Itoh slow dump prints out most of a full page and allows you to set the grey levels for each of the colors. I just stayed with the default settings and was quite happy with the fine picture resolution, though it did take a long time to print (eight minutes). The documentation says it goes much faster if your have a printer buffer. There is also a GTIA 16-shade print dump for modes 1, 2 and 3 which prints most of a full page in about 7 minutes on my printer. I did not have the hardware to try the color dump.

Utilities. RAMbrandt is not directly Atari Dos 2.0 compatible. However, by using the DOS utilities you can read a directory of a DOS disk and load/save pictures on a DOS disk. When using the utilities module you will be asked how the load/save is to be executed. i.e. as a Micropainter file, Koala file, RAMDOS, Font or User. The latter allows you to save your custom brushes, quilts, and tiles on disk. To save you some frustration here, make sure you have selected the proper mode on the opening screen before loading a picture. My frustration was starting to build before I realized Micropainter pictures must be loaded in mode 4.

The documentation also describes a BASIC routine that allows the user to access pictures in basic. I did not try this.

Program Availability. We received our copy of this program from a company called "At Your Service", 2856 Leechburg Road, Lower Burrell, PA 15068. The normal price for the program is $19.95 but a club discount is being offered at $14.95 for 10 or more. The program is also available from *Antic Magazine* for $19.95 but if the order is placed with "At Your Service" the programmer gets 50% of the price versus 10% when ordered through *Antic*.

Conclusion. Though I have not seen every graphics art program for all 8-bit computers, I am inclined to believe the publisher's claim that this program is the most powerful of them all. The number of functions and options is overwhelming. The only negatives are that a book could be written documenting this program versus the twenty pages of typewritten text. Also, I cannot describe the program as user friendly. Even after the numerous hours I have spent working with this program, I still find that I am tied to the documentation to make things work. With 80 possible commands, each of which must be executed in the proper sequence, I imagine I will always need at least the reference command sheet by my side.

What's the bottom line? For $19.95 this program is a fantastic value! It is suitable for all serious graphic arts devotees and most everyone else, except young children who would become frustrated with all the commands.

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THE LABEL PRINTING FEATURE OF "RUBBER STAMP"

by Tom Jarrell and
W. Williams Schadt -- AURA

The appearance of images, drawings and special fonts on a customized return address label can add a personalized touch and attract attention to the label. Mail order catalogues, veterans groups, charities, and stationers have been the primary sources for these labels, but an alternative is now available for owners of an Atari computer with 48K of RAM, a disk drive, a dot matrix printer and a program called RUBBER STAMP from XLent Software in Springfield, Virginia.

The print options within the RUBBER STAMP program include a label printing feature which is mentioned, but certainly not fully explained, in the program documentation from XLent. The statement below was extracted from the PRINT OPTIONS section of the RUBBER STAMP manual.

> Print the RUBBER STAMP screen or labels. Select 'S' or 'L'. ... If you choose to print labels, you can print from 1 to 99 of them. Use the up and down arrow keys to change the number. Then press RETURN to start printing. Labels are the first 9 rows of the RUBBER STAMP screen. They will printout continuously for the number selected.

Very few Atari users have discovered the full capabilities of the label printing option of RUBBER STAMP, and the XLent manual is of little help. This article, however, is intended to rectify the situation by providing Atari users with the type of information necessary to use the label printing features of RUBBER STAMP.

The size of a full screen in the RUBBER STAMP program consists of 20 visible lines and 40 columns, but only the contents of the top nine lines are printed when the label printing option is selected. Based on our experience, it appears that this feature was designed for labels that are about one inch high because nine lines require one vertical inch when they are printed. Allowing for some white space between the labels, the top and bottom lines should probably be left blank. Thus, seven lines remain for icons and text which should be sufficient space for most applications.

When an icon or other graphic image is to appear on the label, the user has several choices. The Graphics Editor portion of RUBBER STAMP can be used to create a graphics image with the draw, plot, circle, square, fill, etc. functions built into that editor; icons developed for the program called PRINT SHOP by Broderbund Software can be used in RUBBER STAMP; or images created with programs like MICROILLUSTRATOR and stored in 62 sector file format can be loaded directly into the RUBBER STAMP screen.

If the Graphics Editor of RUBBER STAMP is used to create an icon, the icon can be moved about the screen and placed at any desired location. RUBBER STAMP has built-in commands to move the icon up, down, left or right and many other commands are available that permit the image to be flipped, replicated, reduced or enlarged.

An icon developed for the PRINT SHOP program can be converted into the RUBBER STAMP format using a conversion utility program that is available on the main menu of RUBBER STAMP. The conversion process sometimes causes image distortion, but the RUBBER STAMP Graphics Editor can usually repair the damage. Several commercial and public domain disks containing a wide variety of icons in PRINT SHOP format are available. Disk #59 from the AURA Disk Library contains 56 different icons in the PRINT SHOP data disk format.

Images stored in the 62 sector file format can be loaded directly into RUBBER STAMP using the "RUBBER STAMP SCREEN LOAD" option on the main menu. A 62-sector image is four lines larger than a full RUBBER STAMP screen, and when a 62-sector file is loaded, four lines at the bottom of the screen will not be visible. They can be seen by scrolling the screen up, but a similar number of lines at the top are then lost. Usually, this is not a major problem, but it can be a nuisance and is an important consideration when other programs, like ATARI ARTIST or KOALA PAD, are used to create images and store them in 62-sector file format.

The Atari symbol shown in Figure #1 was converted to a RUBBER STAMP icon, loaded into the upper left quadrant of the RUBBER STAMP screen and then the image movement commands built into the Graphics Editor were used to move the icon to the desired location between lines 1 and 9 and against the extreme left side of the screen. The Graphics Editor can be used to position the icon anywhere, but only that portion of the icon on lines one through nine will appear on the printed label.

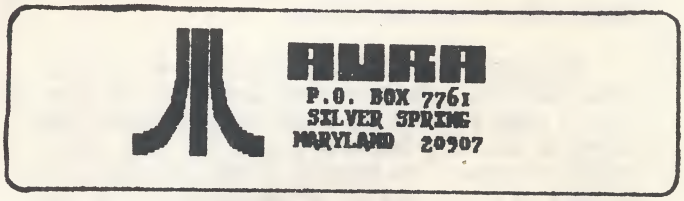

Figure #1

The size of the icon can be reduced by using the CONTROL K command to compress the image into the upper left quadrant. This compression process reduces the size of the icon to 25 percent of the size shown in Figure #1, but the compression process often distorts the image. Other commands, CONTROL D and CONTROL H, are available to reduce the height and width of the icon, but image distortion may still be a problem.

After the icon was positioned, the Text Editor of RUBBER STAMP was used to enter the name and address lines shown in Figure #1. The text can be entered using the standard Atari character font or any of the other character fonts that are readily available. The top line of text in Figure #1 was created with a font called BLOCK2 with the character height set equal to "2" and the width set equal to "3." The second through fourth lines were produced with a font called TYPEFONT, and both horizontal

and vertical sizes were set at "1." Both of these fonts can be found on the font disk available from XLent. Twenty-two different fonts are available on AURA Library Disk #23.

The blank labels used were 3.5 inches wide, 15/16 inch high, and spaced on continuous feed paper with one inch between the top of each label. The outside edge of a blank label is shown in Figure #1 as a solid boundary line. Several copies of the label were printed to permit alignment and centering of the labels on the printer carriage. A maximum of 99 copies of a label can be automatically printed by the RUBBER STAMP program. Ten minutes elapsed while 50 of these labels were printed on a Panasonic 1091 printer, but 24 minutes were required to print the same number on an Epson MX-80 printer equipped with Graftrax.

The label printing feature of the RUBBER STAMP program has many useful applications. The flexibility of combining fonts and icons is very powerful; and text can be printed in several different heights and widths. RUBBER STAMP could be used to print an icon on many labels, and a word processor or data base manager could be used later to print text on address labels, name tags, iron-on transfers or just about anything you can imagine.

The RUBBER STAMP program from XLent Software is quite good; we just wish that the staff of XLent would learn that complete, thorough and well-written documentation containing examples and full explanations of all the program features is just as important as the software.

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SOME USEFUL PEEKS AND POKES
by W. Williams Schadt -- AURA

The January 1986 issue of *Antic* magazine included an excellent article by Ian Chadwick containing some useful PEEK and POKE locations for XL and XE owners. For those CURRENT NOTES readers who have not seen that article, this paper summarizes some of the more useful techniques presented by Mr. Chadwick.

Slow vertical scrolling in Graphics mode zero can be activated by simply executing POKE 622,255. To observe the slow scrolling, LOAD any BASIC program, type POKE 622,255 and then type LIST. Notice that the scrolling speed is slower than normal. Now type DOS and notice that the slow scrolling feature is still active. Normal scrolling can be restored by typing POKE 622,0.

Would you like to redirect the screen display to the printer? To accomplish that, simply execute the following two commands: POKE 838,202 and POKE 839,254. All the text that would normally appear on the screen is sent to the printer instead. The keyboard is still active, and typed characters will be seen on the screen, but all the characters that a program normally writes on the screen will be printed on paper instead. To return to screen display, type POKE 838,175 and POKE 839,242.

The XL and XE models contain a hidden international or European character set which can be activated by entering POKE 756,204. The new characters can be seen by holding down the CONTROL key while striking any alphanumeric key. The command POKE 756,224 returns to the normal Atari character set.

Both the delay rate and the repeat rate for repeating keys on the Atari keyboard can be adjusted. RAM location 729 controls the time delay between striking the key and the moment it begins to repeat. The time delay is measured in increments equal to 1/60 of a second, and the default value is 48 or 0.8 seconds. Typing POKE 729,36 sets the delay at 36/60 or 0.6 seconds, while POKE 729,6 sets the delay to 6/60 or 0.1 seconds. Poking a zero into 729 turns off the repeat function entirely.

The repeat rate is controlled by the value in RAM location 730. It is also measured in increments of 1/60 of a second. The default value is 6 which means that a key is repeated once every 6/60 or 0.1 second yielding 10 repeats every second. Typing POKE 730,60 sets the repeat rate at one per second while POKE 730,1 yields 60 repeats per second.

The keyboard can be completely disable by typing POKE 621,255. Since the keyboard is disabled, the RESET key must be pressed to enable it again. A program could enable the keyboard by simply executing POKE 621,0.

The Chadwick article explains how the Atari keyboard could be converted from QWERTY format to the Dvorak design or any other keyboard layout.

When a key is pressed, the XL and XE computers produce a bothersome noise which is normally eliminated by turning down the volume control on the TV or monitor. Unfortunately, this also eliminates all sound prompts, tones or music. An easier way to turn off the keyclick is POKE 731,255. The keyclick is enabled again with POKE 731,0.

Many application programs use PEEK(53279) to determine the status of the OPTION, SELECT or START keys, but how can the status of the HELP key be determined? After the HELP key is pressed, the decimal value 17 is placed and remains in RAM location 732. Type POKE 732,0 to clear out any values remaining in location 732. The following list shows what values will be found in location 732 if the HELP and other keys are pressed after location 732 was cleared: 17 if the HELP key was pressed, 81 if the SHIFT and HELP keys were presses simultaneously, and 145 if the CONTROL and HELP keys were pressed.

How many times have you booted the Atari and forgot to hold down the OPTION key to eliminate BASIC? In most cases the computer is turned off and the system is rebooted. An alternative is to type POKE 1016,255 and press the RESET key, BASIC is then disabled and the system boots in DOS. The system, however, will have to be rebooted to get back to BASIC.

The Chadwick article contains several other useful hints and explanations concerning RAM locations in Atari models XL and XE. It is recommended reading for serious students of the Atari.

256K, 130-XE COMPATIBLE UPGRADE FOR THE ATARI 800XL

by Claus Buchholz

I designed the 256K upgrade described in my article, "The Quarter-Meg Atari" (BYTE, September, 1985), in December, 1984. Since this predated the 130XE, there was no precedent for extended memory on the XLs. I felt free to implement a system of eight 32K banks. The major reason was to keep the add-on circuit as simple as possible.

The 130XE, introduced in early 1985, set a different standard for bank-select memory. It uses 16K banks and makes them separately available to both the CPU and the video controller (ANTIC). The XE has 128K total memory. The 64K extended RAM is split into four 16K banks.

A 256K 800XL has 192K extended RAM, which requires 12 16K banks. I have designed a new upgrade for the 800XL that implements such a scheme. Its similarity to the 130XE's scheme allows use of software for the XE on a 256K 800XL.

To select one of four banks, the XE uses two bits, #2 and #3, in the memory control register (port B of the 6520 PIA, addressed at $D301 or 54017 decimal). Zeroing bit #4 makes the selected bank appear at addresses $4000-$7FFF (16384 to 32767 decimal), as seen by the CPU. Zeroing bit #5 makes it appear there as seen by ANTIC.

In my upgrade, bits #2, #3, #5 and #6 select one of the twelve banks. Zeroing bit #4 makes the selected bank appear at $4000-$7FFF to both the CPU and ANTIC. So, any program for the XE that uses the extended RAM for CPU storage will work on an 800XL with this mod. Those programs won't use the additional 128K, though. Programs that use the video banking feature of the XE might run on the modified XL, but the screen display will be wrong.

The procedure for this upgrade is basically the same as in the article, except for the following points. If your ANTIC (U7) part number is C021697, use the circuit described by the first connection list below. If it is C012296, include the circuit in the second list. The circuit requires five connections to the PIA (U23). So, pins 12 through 16 must be bent up and connected to the circuit. The rest of the procedure is the same. Notice that this circuit has one more chip than the article's circuit. This is the price of compatibility.

With the 256K dynamic RAMs in your XL, be sure to wait at least ten seconds after turning the computer off. Otherwise it may not coldstart properly when you turn it back on.

My original RAMdisk software doesn't work with this new mod, so I have written a new version. It is used in the same way, except that it offers a choice of either two single-density RAMdisks or one double-density. If you wish a disk copy of the source and object code, send me a blank disk and return mailer with full postage, and I will promptly send it back with the software. Alternately, you may download the software from the Capitol Hill Atari Owners' Society BBS at 517-371-1106 or from the Castle Communications board at 517-371-4234. The source file is called QMEGXLD.SRC for Quater-MEG XL Double. *[NOTE: The necessary files are also available in NOVATARI UTILITY Disk No. 9: 256K RAM Upgrade for the 800XL. Ed.]*

Also available is a RAMdisk program that sets up one single-density RAMdisk and leaves the XE-equivalent banks free for XE software. This is quite useful with BASIC XE, DOS 2.5, or the new Synapse software. Its name is QMEGXLS.SRC.

I ask one thing in return for this information: Please pass it around to all your interested friends. Put it in your club's library or on your favorite BBS. Encouraging software support of 256K will result in many interesting uses for it. Thank you and enjoy!

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Definition of Memory Control Register at $D301 (54017 decimal)

XL MOD	130XE
bit: 7 6 5 4 3 2 1 0	bit: 7 6 5 4 3 2 1 0
D a b E c d B R	D V C x y B R
D=0 enables diagnostic ROM	D=0 enables diagnostic ROM
B=0 enables BASIC ROM	B=0 enables BASIC ROM
R=1 enables OS ROM	R=1 enables OS ROM
E=0 enables extended RAM	V=0 enables extended RAM for video
abcd is 4-bit extend RAM bank #	C=0 enables extended RAM for CPU
- ranges from 4 to 15	xy is 2-bit extended RAM bank #
- banks 12 to 15 are equivalent to XE's banks 0 to 3	- ranges from 0 to 3

-------- Parts List ---------

8 - 41256 256K-bit dynamic RAM (200ns or less)
1 - 74LS153 Dual 4-to-1 multiplexer (IC2)
1 - 74LS139 Dual 2-to-4 decoder (IC3)
1 - 33 ohm, 1/4 watt resistor

Additional Parts For ANTIC #C012296

1 - 74LS158 Quad inverting 2-to-1 multiplexer (IC4)
1 - 74LS393 Dual 4-bit counter (IC5)

List of Connections For the Upgrade Circuit

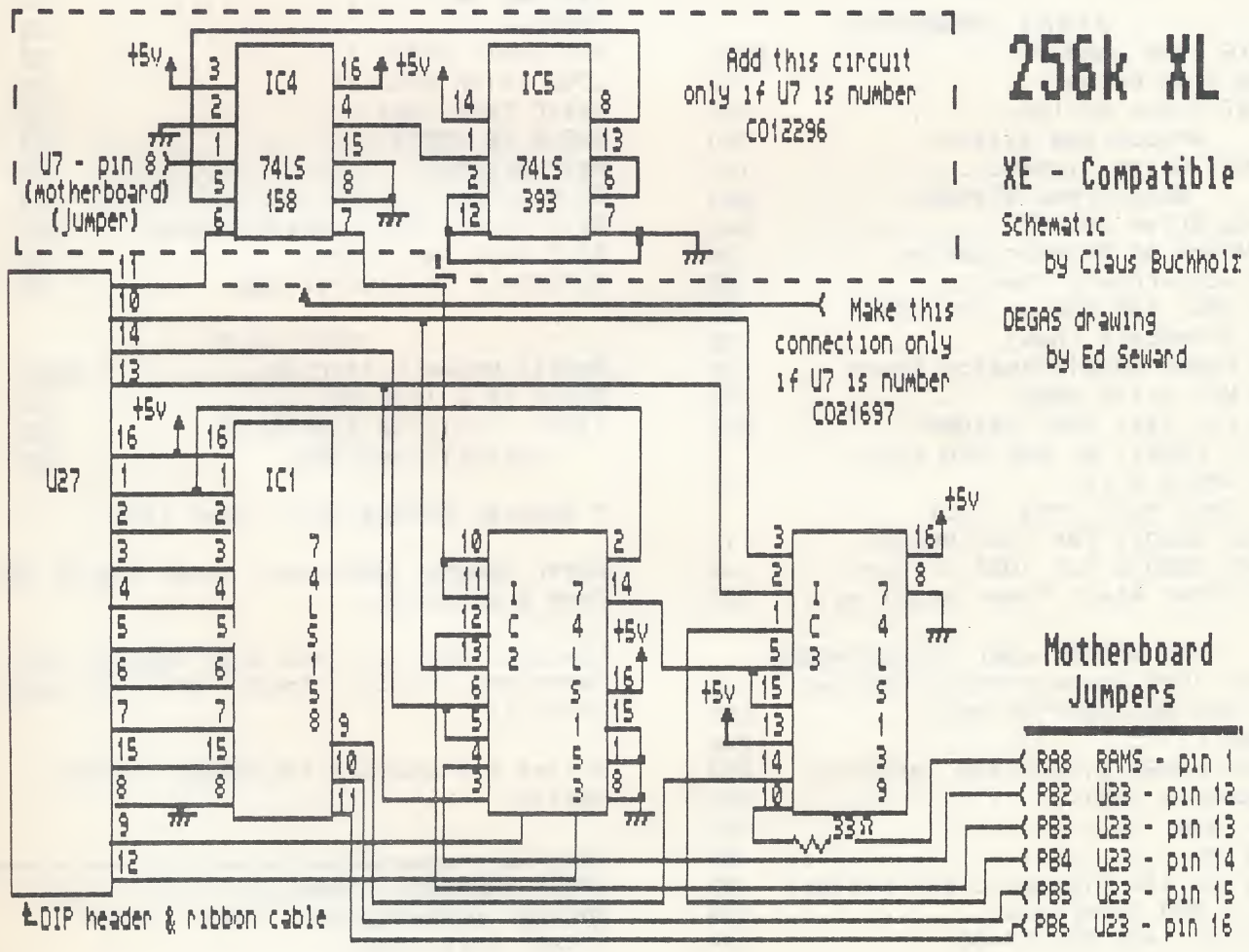
Instead of a drawing of the upgrade circuit, below is a list of connections. Each entry in the list begins with the name of the signal followed by all the IC pins that connect together and share the signal. IC3-13 means pin 13 of IC3. The IC numbers appear in the parts list above. IC1 is the 74LS158 chip from socket U27 on the XL motherboard. DIP is the DIP header to be plugged into

socket U27. U23-xx refers to the pins you bend up on the PIA chip at U23 on the motherboard.

Vcc : DIP-16, IC1-16, IC2-16, IC3-16, IC3-13
Vss : DIP-8, IC1-8, IC2-8, IC2-1, IC2-15, IC3-8
A7 : DIP-11, IC2-10, IC2-11
A15 : DIP-10, IC2-13, IC3-3
A6 : DIP-14, IC2-6, IC2-5
A14 : DIP-13, IC2-3, IC3-2
MUX : DIP-1, IC1-1, IC2-2
A4 : DIP-2, IC1-2
A12 : DIP-3, IC1-3
RA4 : IC1-4, DIP-4
A5 : DIP-5, IC1-5
A13 : DIP-6, IC1-6
RA5 : IC1-7, DIP-7
-E : DIP-15, IC1-15
RA7 : IC2-9, DIP-9
RA6 : IC2-7, DIP-12
PB2 : U23-12, IC2-4
PB3 : U23-13, IC2-12
PB4 : U23-14, IC3-1
PB5 : U23-15, IC1-10
PB6 : U23-16, IC1-11
-Zd : IC1-9, IC3-14
-O1a: IC3-5, IC3-15, IC2-14
-O2b: IC3-10, One side of resistor
RA8 : Other side of resistor, Pin 1 of all RAMs

If your U7 part number is C012296, do not connect signal A7 above, and make the following additional connections. The connection to U7 is to a trace on the motherboard that runs from pin 8 of U7.

Vcc : DIP-16, IC4-16, IC5-14, IC4-3
Vss : DIP-8, IC4-8, IC4-2, IC4-15, IC5-7, IC5-2, IC5-12
A7 : DIP-11, IC4-6
-REF: U7-8, IC4-1
REF : IC4-4, IC5-1
A7' : IC4-7, IC2-10, IC2-11
Q7 : IC5-8, IC4-5
Q3 : IC5-6, IC5-13



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BASIC VIEW:

A Programming and Learning Companion
Reviewed by Dave Shonyo - NOVATARI

I can't pretend to be a hotshot programmer, but I do enjoy solving programming problems and debugging programs. Finding a seemingly intractable bug can give me at least as much satisfaction as solving a good adventure problem. I felt a real loss when magazines began improving the accuracy of their type-in listings and providing check-sum programs. Those early bug-invested type-ins were a debuggers Valhala.

Whether you debug for the challenge or the necessity of it, a program is now on the market that will add a new dimension to the task. It's called BASIC VIEW, from Software Concepts. What BASIC VIEW does is allow you to step through an Atari BASIC-language program one statement at a time while you watch the effect of each statement on your program. You may also examine the value of any variable and the contents of any memory location at any point during the execution of your program.

The BASIC VIEW screen is divided horizontally in three segments. The topmost part provides a window on eleven physical lines of our program listing. The middle part is occupied by a series of nested menus. The values of your program variables and the contents of the memory locations are displayed in the bottom portion.

Program functions are controlled via the keyboard or a joystick or both. For example, you can scroll your listing past the window using the joystick, or you can jump to any point in the program by typing in the appropriate line number.

Selecting "RUN" from the menu will start execution of your program, one statement at a time. The speed of execution is joystick-controlled. Execution may be paused as desired. At any point, you may exit to BASIC for purposes of editing, and then return to the statement that you left from. A big attraction of this package is that hitting the OPTION key will toggle you between the BASIC VIEW screen and your program screen. Thus you can examine the effect of each program statement on your text or graphics screen display.

With one exception, normal keyboard input is possible while your program screen is displayed. The exception is that the OPTION key has been preempted by BASIC VIEW as a screen toggle. Also, joystick port 1 is normally used for BASIC VIEW control. However, this can be shifted to another port by poking the proper value in memory location 29701.

The variables and their current values may be scrolled horizontally across the bottom of the screen, or a particular variable may be accessed directly from the keyboard. String arrays may be expanded to reveal the contents of the string. This applies to both one- and two-dimensional arrays. Likewise, memory locations and their contents may be made to scroll across the screen in numerical order, or called up directly from the keyboard. At any time during the execution of your program, the values of variables and the contents of memory locations may be easily and quickly altered. That's very handy during program development, as well as for debugging.

In general, the program operates as smooth as butter and is a real pleasure to work with. Its obvious that a good deal of thought went into the design and coding of this tool. The same can be said for the documentation: it is a model of what good documentation ought to be. The major part of the text is a clearly written tutorial that should get almost anyone up to speed on BASIC VIEW quickly and painlessly. A final section, aimed at advanced programmers, concerns details of the internal operation of the program.

That having been said, I must exercise the reviewer's obligation to grouse a bit. I have not found any problems with the package that cannot be surmounted, but there are some annoyances. For example, only two variables can be displayed at a time, and those must be in alphabetical order. Often it is desirable to see how the values of two or more variables change in relation to each other. It is very awkward to do so with BASIC VIEW unless the variables that you are interested in are only two in number and happen to fall next to each other alphabetically. Similarly, the memory locations are displayed in numerical order, and only two are visible at a time.

BASIC VIEW has a problem with certain kinds of loops, where more than one statement is contained in a single program line. The following line from a nested FOR-NEXT loop is an example:

```
100 FOR X=1 TO 9: FOR Y=0 to 9: FOR Z=0 TO 9
```

Z will be incremented 10 times, as it should. Then, after NEXT Y is executed, the program is thrown back to the beginning of line 100 and it begins the Z loop all over again. X and Y are never incremented. A similar problem sometimes occurs with GOSUB-RETURN loops. An example is:

```
50 GOSUB 850: NG=0
```

Here, the RETURN statement will always send the program back to the beginning of line 50 and so into a continuous loop. I have not worked with BASIC VIEW enough to determine why this only happens in some, but not all, cases. The only way to be certain that it does not happen is to put all of your FOR's and GOSUB's on their onw lines. That can be something of a pain, especially if the program you are working with is not being written from scratch.

Despite these relatively minor flaws, BASIC VIEW is a great improvement over the usual routine of eyeballing the program listing and doing a trial and error exercise at the keyboard. I should point out that debugging is by no means the only application for BASIC VIEW. There is no better way of honing ones programming skills than by studying programs written by others. This applies equally to the novice who has just been through Introduction to BASIC as it does to the seasoned programmer. And actually watching a program execute as you step through it, statement-by-statement, really enhances the learning process.

As far as I know, BASIC VIEW is available only through the mail, from: Software Concepts, Box 1325, Lisle, IL 60532 (312) 968-0605. The price is $20 postpaid. That's probably one of the better investments that anyone who ever has occasion to muck around inside an Atari BASIC program will ever make.

LEARNING THROUGH LOGO

by Susan Wolff - NOVATARI

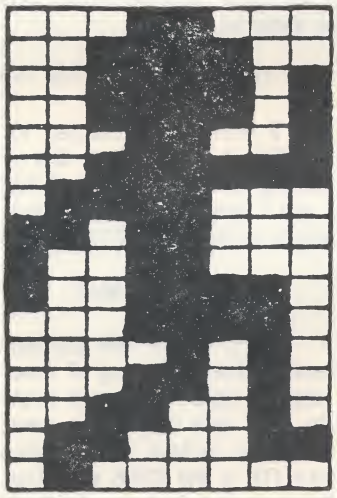
In last month's issue (March 1986), I wrote instructions for changing the shape of the turtles. Assuming that you've spent the month experimenting with turtles shaped like animals, people, letters, robots, etc., let's go on and discuss how to install your new shapes into memory so that when you save your workspace, your shapes get saved too.

Step 2. Saving and Using Turtle Shapes

Saving Shapes

The turtles you have designed will disappear forever when you turn off the computer. If you want to save them you need to install them in your workspace in global variables. Each shape will need a name, just as your procedures need names to be saved.

Try making this design again in shape editor 1:

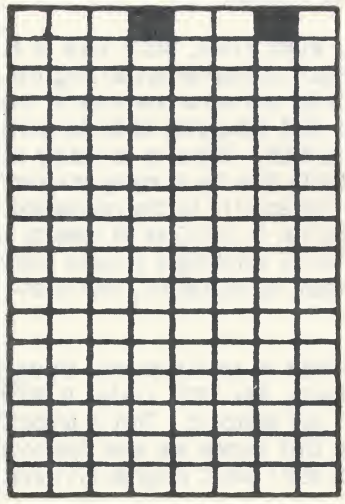


Let's call this shape KID. Type the following instruction:

```
MAKE "KID GETSH 1
```

This "gets" the shape in editor 1 and names it KID in a global variable. Now when you save your workspace to a file on a disk, the value of KID gets saved too.

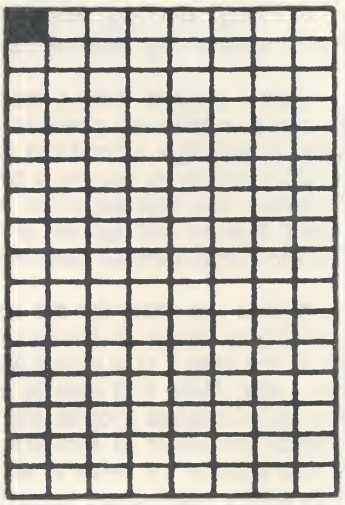
The grid is read as 16 separate binary values, one for each row. The value for the top row in this grid would be 17. (00010010)



Type PONS (print out names) to see the binary values for all 16 rows of KID.

Save your workspace to a file on a disk and turn off your computer. Remember, everything with a name in the workspace will be saved in that file.

Now load the file with your shape back into the computer. This puts the values for your shape back into the workspace.



It does not, however, put the shape back into the shape editor. To illustrate this, type PONS. You will see the name of your shape and its binary values.

Type EDSH 1, however, and this will show you that nothing has been put into the shape editor.

Putting Shapes Back

The command:

```
PUTSH 1 :KID
```

will PUT the value for the SHape KID back into shape editor 1. Type it in.

Now type EDSH 1 and there's your KID!

In order not to have to put your shapes back each time you load in a file, you should add a procedure such as this to your workspace.

```
TO PUT.BACK
PUTSH 1 :KID
END
```

If you design other shapes in other editors, PUTSH statements may be added to PUT.BACK for them.

The next time you load your file you will only have to type PUT.BACK to be able to use your shapes. If your shapes are part of a larger program, you can have PUT.BACK at the start of your superprocedure.

Using Shapes

The SETSH command will tell one or more turtles to take on another shape. Here are some sample commands:

```
TELL 0 SETSH 1
TELL 1 SETSH 4
TELL [1 2] SETSH 3
TELL 0 SETSH 0
```

Shape 0 is the original turtle.

You can write a procedure which contains the PUTSH commands as well as the SETSH commands, such as:

```
TO SET.UP
PUTSH 1 :KID
TELL [0 1] SETSH 1 ST
END
```

Remember:

1) EDSH n puts you into the shape editor.
2) MAKE "shapename GETSH n puts your shape into a global variable.
3) PUTSH n :shapename puts your shape back into the shape editor.
4) SETSH n gives the turtle a new shape.

Have fun designing and saving shapes. Next month I'll show you how to animate your shapes.

CLASSIFIED ADS

WANTED: ATARI 800, late vintage, no custom modifications. Offering $50. Don Tucker, 301-229-5379.

INDUS GT (ATARI) disk drive $150; ATARI 1025 Dot Matrix Printer $50. Both items in "like new" condition. Call Evan Pancake after 5 pm (804) 971-7770.

HAYES Smart Modem, 300 baud, with cable for Atari 800. $125.00 Call Mark Ausley, (703) 221-6382.

WANTED: Computer and Disk Drive Technician. Call Computer Service Land, (703) 237-0558.

ST Update (Continued from page 34)

H&D Base Upgrades. SEND IN YOUR REGISTRATION CARD! Registered owners are sent a quarterly copy of "Journal of Micronomy" (I haven't gotten one yet -- maybe I'd better look for that registration card.) Those who turn in cards in the interim are sent a special copy to bring them up to date. Update information is also placed on CompuServe and Mirage's own BBS. Anomalies are covered free in the journal or on the BBSs. You can send in your registered disk and $5 and receive an immediate upgrade. The latest version of H&D Base is 125xxx. It contains: 1) a restructured mailing list command file, much faster and easier to use; 2) a mailing list program with GEM; 3) an autorun feature for any command file you designate on disk; and 4) trapping of major "mushroom" errors.

VIP Professional Upgrades. Users are urged to send in their REGISTRATION CARDS -- this eases the upgrade problem immensely. The latest version is 13 February 86 which, according to Tom Nelson, solves all problems to date. To determine your version date, go to the VIP subdirectory, click on the file PROFESS, and then click on "FILE" and "Show Info...". The date of the program is shown on the line "Last modified:____". You can determine the date of any of the VIP components in this manner. VIP has sent dealers upgraded disks and asked them to provide the upgrade to all customers. You can call the VIP tech line for more info on upgrades.

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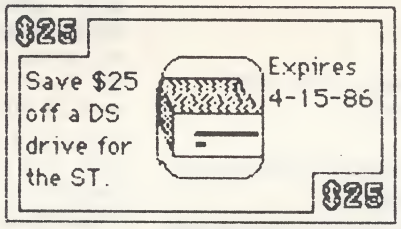

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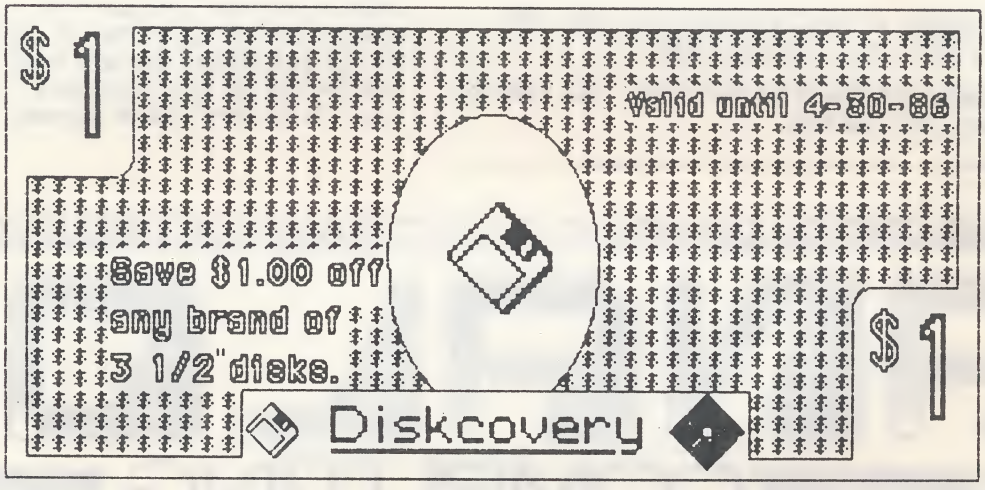

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GAME VIEWS

by Roland Gabeler - NOVATARI

SUNDOG ... A FROZEN LEGACY?

Before I get into the actual review of this ST game, I would like to give you an idea how expensive this game was for me to purchase. I had no plans to purchase an ST computer for a couple of years. After all, the "new" Atari made a big deal of stating that they were not a "game" company, and since that is the main purpose for which I use a computer, I saw no immediate need to consider an ST. Then came the demo disk of the Sundog .... and instant love. The graphics quality blew me away. I had seen the beautiful graphic pictures the ST was capable of producing but nothing translated into a great game. In fact, I had read that many of the sprite capabilities and other things I don't profess to understand, but which a great machine needs, would not be part of the ST's hardware. I assumed the game manufacturers would find a way to get around the limitations but not in the first year of production.

Then I saw the Mudpies and Hex games that proved that smooth animation and "arcade" style games were possible on the ST. So, combining the spectacular smooth quality of the Sundog demo with the aforementioned arcade capabilities, I soon began to work on the problem of amassing the necessary dollars to acquire an Atari ST. It was all Sundog's fault, but that was a demo, not a working game ... was it worth it when the game came out six months later? In a word ... YES! I have enjoyed the final product more than even the demo had led me to believe.

Sundog is based on a story of a man who inherits a star freighter, very similar to the Millinium Falcon in the Star Wars trilogy. The goal of the man (and the gameplayer) is to locate a new colony on the planet Jondd, to determine what supplies they need, and to scour the planet and nearby solar system to obtain the supplies and deliver them safely to the colony.

First attempts to locate supplies on the planet, may require a lot of searching of various buildings. This is usually accomplished in a quiet relaxing methodical manner, the only hassles being street muggers who are usually easy to avoid. This phase of the game allows you to explore the surface of the planet by detaching a pod (land rover) from your spacecraft to explore the planet's surface. The street muggers bother you when you leave that pod to walk on the street. You have to leave the pod to enter buildings to buy supplies, ship-repair parts, food and drink, weapons and shields, and gather gossip from the local people.

The price at which you buy goods and later sell them is the only way to increase the money you have to use in the game. You start out with a great deal of money located in banks on several planets, but spend quite a bit to buy the supplies needed by the colony, ship repair parts etc., and to keep your plans afloat. By the way, you also have to get enough rest by sleeping, don't do what I did and attempt to sleep in a booth in a bar. The result is the same as if you did that in downtown anywhere USA -- you wake up missing everything you own! Sleep only in the safety of your pod, ship, or in a hotel. Soon you find the next phase of exploration requires you to leave the quiet comfort of the home planet to find needed supplies on other planets.

Flying the Sundog is sometimes frustrating as you attempt to comprehend the various displays of navigational information and make the ship go exactly where you want it to land. But soon you will overcome these problems and be exploring other planets, searching for the supplies the colony is requesting. You find the supplies in a quiet search of the planet's buildings, return to the ship and lift off to return to Jondd.

Then for the first time, chaos breaks loose, the pirates in outer space attack you quickly and with considerable power. If you are like me, since everything had been quiet so long, you would be caught frantically installing the tactical display and arming your lasers to fight back. Wrong move! The shields have a greater priority and by the way they take a while to charge! I was, needless to say, dead! This is the pinpoint I had been looking forward to -- as I have stated before, I am not the pure adventure-game type. I had been enjoying the game but was looking forward to some action, now I had it, but I was not prepared. So, as you can see, Sundog has the best of both worlds, an animated graphic adventure and fast arcade action.

The game is referred to by the company as a "zoom" action game. This reference seems to be related to the part of the gameplay when you enter a building, the scene of the interior "zooms" to a closeup of the interior. This is a nice touch but maybe not a feature the requires a headline? The other headline states this is a "frozen" legacy, well that would conjure up a vision of a game on an ice planet like Hoth in the Star Wars trilogy, but instead seems to refer to one of the items the colony needs, a cryogenically frozen colonist stored in various warehouses in the region.

The bottom line on Sundog: a game of search in the various cities of the various planets, fighting off the pirates, and surviving to search and fight again. I love this game but rarely sit down to play it unless I have an hour or more to explore.

A few notes on other aspects of Sundog. This game leads you to believe it is not a protected copy. It will copy using many available methods ... but ... the copy you get will play a short-lived game, usually lasting fifteen minutes or so before you meet a game-ending red screen! This is the neatest copy protection I have ever seen, because if you give the "copy" to a friend, he will get to play it just long enough to perhaps fall in love with it before it goes "red" on him. I have overheard complaints in the computer stores of people saying Sundog has a bug that causes this to happen. Well, I can't guarantee it doesn't have any bugs, but I can assure you that my original has never crashed "red". One unfortunate aspect of

(Continued on Page 27)

ZOOMRACKS
Reviewed by Jim Bumpas

[Reprinted from the March, 1986 issue of A.C.E. Ed.]

ZOOMRACKS (16-bit -- Quickview Systems, 146 Main Street, Los Altos, CA 94022 $80 list, but discounts to users groups until May 30 for as low as $40 in quantities of 13 or more) is a novel type of data file program. It makes use of a system never before seen on a computer as far as I know. This novelty is so smoothly executed, and so easy to use, I believe it is destined to become a milestone in personal computer history. It is useful enough to become a standard equivalent to Lotus 1-2-3 in the industry.

I don't believe I'll continue to use spreadsheets for a data manager any more. This program takes a concept from the factory floor, the timecard racks where employees store their time-cards near the time-card punch machine. Only here, each "card" can hold up to 250 lines of data. On a half-meg machine, each file can contain up to 9 racks, each containing over 400 cards. All racks can be displayed on the screen at once, but you might find this too much. There is a 10th rack, but this rack is always the directory of the disk. The data displayed on the screen is compacted so that even with 3 to 5 racks on the screen, "Thursday" might appear as "Thr".

When you click the mouse on an item, you can "zoom" up on it so it fills the screen with just one rack, or just one "Q" card in the rack ("Q" for "quick card"). Sorts are nearly instantaneous; as you enter a new record in any rack, it is automatically inserted in the sort order in the field you have selected. To resort is a simple click and two keystrokes away.

This is the first really "free-form" data filer program I've seen. There are almost no rules to its use. Menus are available for the user not familiar with the commands. And the commands can be executed directly, without using the menus at all. When you first begin, you can also toggle on a "help" function which uses the bottom 4 lines of the screen to display information about the menu choices. There is also an excellent 128-page manual, and a long disk tutorial. The manual's table of contents is so complete, you probably won't miss the lack of an index.

I'm so excited about the imaginative concept of this program I'm afraid I can't fully communicate it. The screen doesn't just show you a title page and move you to a menu where you can "create" a database. The program starts up with a demo which places a screen full of racks and cards before you. There is a macro function in the program permitting you to use 2 keystrokes to enter repetitive data or commands. Or, you can create a custom application which automatically runs when you run the program.

When a rack is displayed, only the top line of data on each card appears. You can quickly re-assign which line is the "top" line. You can quickly pull up cards which rellate to some data in another rack in the file. You can't really make a mistake more costly than a couple of keystrokes. Almost anything you do, you can undo with one keystroke. You can add, split and join fields, and change field names (labels) without losing any data. You can even change the name of a rack within a file.

The program can be used as a small word processor. The editing and formatting functions are very complete. You can produce mailing labels, you can create custom forms. You can use the mail merge function to print and address form letters. You have the option to save files in ASCII format which will permit the files to be used with other programs or to transfer the data to other computers. The only addition to the power of the program I can imagine is to add some calculation function. Let's see now, how about a phone dialer to go with my list of addresses and phone numbers.

I highly recommend this program to anyone who needs to keep track of things -- items, addresses, appointments, collections, things to do. You will think about ordering things in a totally different way than you've every done before. You can be an anarchist, with very little external discipline to the way in which you handle your data and this program will bring order to your chaos. And the order will be created almost effortlessly.

[The following discounts are available from QuickView Systems:

	No. of Copies			
Month:	1	2-5	6-12	13+
Mar	$59	$48	$44	$40
Apr*	"	"	"	"
May	$80	$80	$50	$46

* Since CURRENT NOTES readers won't see these discounts until early in April, QuickView has extended the March discounts through the end of April.]

==========

SUNDOG (Continued from page 26)

this is the fact that you have to play and save the current game to the original Sundog disk. If you could write protect this disk you wouldn't feel such a great need to have a backup, but you can't play this game on a write-protected disk. Therefore you are going to worry about messing up your original and would seek to make a backup. This is why many of the people who bought the game thought the game had the "red" bug as they backed it up and played the "backup" copy. The game does allow you to save games to another disk but only as a transfer after it has saved it to the original.

Another point is a sincere hope the producers of this game will bring it out for the 8-bit Ataris. While I know it can't be produced in these great graphics and work with the mouse, I know it can be done on the 8-bit since it was originally put out on the Apple computer. If you have an ST, buy Sundog. If you don't, pray they convert it to the 8-bit or ask an ST owner to let you borrow his computer one weekend afternoon and take off on a great exploration adventure.

BRATACCUS - INTERACTIVE VIDEO ST GRAPHICS ADVENTURE PLUS

Reviewed by Frank Sommers - CN

The title screen clears as you press any key and the few seconds of darkness is replaced by a red-brick, duplex interior, with a picture of an underwater search craft on the back wall, a sign "Arrival" to the left, a green and white elevator pad, descending and rising between levels, as Keyne emerges from a small cylindrical tele-transporter on the 2nd floor of the structure.

A 21st-Century whistle blower, Keyne completes his successful escape from his mother planet to an asteroid, peopled with a central casting of almost three dozen distinctive role players, plus pint-sized robots, who in the blink of a command can produce triple-sized, beer-can shaped phazers that instantly end our hero's career on the asteroid. Of such stuff is BRATACCUS constructed in its colorful, creative detail, with graffiti on the walls, TV-guard cameras rotating on the ceiling, TV screens broadcasting news bits and clues, and loud speakers sirening forth planetary alerts.

For a non-pro at adventure games and full graphics-adventure computer art, your first encounter exploring the arcane mysteries of how the program works, or doesn't work, will leave you impressed by the detail, intrigued by the interactive, read anticipatory controls, and frustrated at how long it takes to make the mouse obey.

The goal is to move Keyne around the asteroid to an undefined goal that will help him expose the corruption and duplicity on his own planet and clear his name for the future chronicals of the Universe. But to move and propel our hero is no simple task. With mouse, or keys, or joystick, he leaps, twists, and jumps at your commands. The art is to control his gravity-free power, to stop him at the edge of the elevator shaft to the Calypso bar, so that he may board the transport pad as it arrives, versus jump over it and smash his head against the opposite wall, or slip forward and fall to the bottom of the shaft, which causes him to announce, "Ouch", as he rights himself, and you to utter harsher words, as the jarring fall causes him to drop everything he has painstakingly acquired on his brief initial tour.

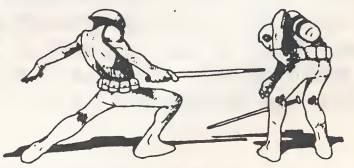
Bending and picking up items is an art form, in itself. The frustrations/satisfaction at trying to do this well to speed up your quest is intensified by the need to whip out your sword, straighten up and fight fiercely or be killed by an attacking asteroid planeteer, who has ambled forth thru one of the sliding doors and discovered you in a restricted area without a pass. Certain death or prison unless you can draw fast enough to skewer him first. While the sword play is not quite up to Erol Flynn's, some skill is required to avoid being the one that drops his weapon and slumps to the floor.

BRATACCUS arrived on the market with applause, one of the first programs to stretch the limits of ST graphics and memory. "Interactive" was the word used to describe it, but ill-defined. It, indeed, brings with it a new dimension in action controlling adventure figures. The joystick seems to be the accepted superior of the 3 means of moving the figure. Turning, pivoting, jumping, attacking, sword-fighting the hostiles requires some slight mastery, sufficient at least to generate a sense of satisfaction as "clumsy" is replaced with emerging adeptness. But frustration is the watch-word, as you emerge from one situation, e.g. jail with two new items for your kit and whistle past two robots, only to hear an alarm sound and know you are the object of an All Planet Alert from which there is scant escape, and after your execution, the program reverts to the first screen where you are seen again emerging from the tele-transporter, and must start again to acquire, search, conquer and discover.

Your interest is spiced by constant dialogue with the characters you encounter, blinking up on the screen in miniature cartoon clouds above the speaker's head. All are keyed to the action, and provide clues and direction to your search. Your responses are critical to your fate and selected by pressing the button at the preferred multiple choice. They can propel you suddenly forward in the puzzle, just as suddenly cause your demise. Variation is the watchword, and an acceptable reply from a previous screen, repeated again can be a sudden death knell.

Plincking the "Help" key provides you with a range of options. The two most useful being "F2 Save Game Current Game" and "F6 Select control mode". With the first you can avert the tedium of always beginning again by loading your last ending or any of five different endings. And toggling the joy stick instead of the mouse or keyboard is a definite balm to your frustration on refining control of the hero's movements.

The final solution is still out there for this reviewer. Once after a proper response, I was lead by guards, not to jail -- their favorite trip -- but off, thru several corridors and elevators to a jolly gentlemen in a new transporter location. What might have transpired is still a mystery. Thinking I might be near victory, playing Rambo, I showed him my sword and ran him threw. Immediately I was surrounded by guards and "dispatched" for having "killed our leader".



The game insinuates itself gradually into your curiosity as you slowly master its rudimentary tools. It has more than a whiff of real merit to it.

Hopefully, the professional adventurer players will master, evaluate, and report back to CURRENT NOTES on its highest merits, and what glory awaits you at the final solution.

Psygnosis Limited, a British company, has created a bit of software with novel twists. Apex Resources of Brookline, Mass is to be congratulated for bringing it over to us. Well done.

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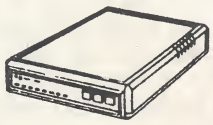

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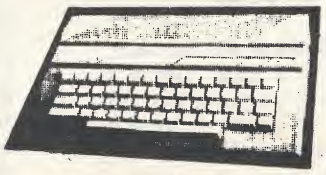

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SO WHAT'S SO GREAT ABOUT AN ATARI?

By William Blair

[Mr. Blair, an avid Atari fan, has compiled an impressive brochure on the ST, aimed primarily at 8-bit computer users thinking about ugrading to a more powerful machine. I found the report very interesting and thought our readers would enjoy it as well. By the way, I have added some excerpts from the BYTE magazine reviews which were not available when Mr. Blair sent in his report. Ed.]

520ST PUBLICITY

Creative Computing's October 1985 issue featured the 520ST in its cover story with the first review of this system in a major independent computer publication. Their reaction? Here are a few excerpts: "Without question, the most advanced, most powerful microcomputer your money can buy... designed to move the power of machines costing thousands of dollars into the range a middle class consumer can afford... fairly positioned to blow the Amiga right out of the water... The Atari ST delivers 75%* of the splendor of the desktop interface at 25% of the price of a 512K Macintosh."

Compute! magazine said: "The [disk] drive is very impressive...and is the fastest floppy we've ever seen. In fact, it appears to be faster than hard disks on the Macintosh. The monitor, too, is stunning. It refreshes the screen at 70 hertz instead of 60 hertz, displaying a super-sharp image that looks like a sheet of paper with crisp lettering."

From InfoWorld: "Our [1985] Hardware Value of the Year [award] goes to the 520ST, a product whose makers pride themselves on providing quality for a low price. Indeed, what last year was available only on machines costing $2500 and up can now be had for less than $1000. The power of a 68000 microprocessor, the ease of an Icon-based graphic user interface, and the ability to do serious work is available this year for the cost of last year's toy... Atari 520ST, an amazing machine for the price."

John Dvorak in InfoWorld: "I recently got to play with an Atari 520ST and found it to be a super little machine for the money. The keyboard felt good and the new teflon lubricated mouse felt great. If I were to look at the Atari 520ST and the Amiga and choose the winner in a head-on battle, I'd have to pick the Atari. The Amiga simply doesn't offer that much more performance or features. Also, the techies seem to be headed toward the Atari."

More John Dvorak in the San Francisco Examiner: "A battle is brewing between the Amiga computer... and the Atari 520ST. I pick the Atari as the winner in this fight... The primary influence peddlers are voting against the Amiga... I know at least three people who have quit their jobs to work on software for the Atari. One person I know folded his newsletter so he could concentrate on software for the Atari... I'm voting with him."

Steve Panak of ANALOG Computing magazine: "The 520ST. Saw my first game on it, and the graphics are spectacular. That's an understatement; it yields true arcade quality... The Amiga. After months of publicity, I finally saw one. First impression: I'm not the least bit worried for Atari."

Byte's Editor-in-Chief, Phil Lemmons, visited Atari's engineering and software departments in August and had this to say afterword:

"I visited Atari yesterday and got my first really good look at the ST520. I'm extremely impressed. Graphics are fast and first-rate. The most important thing is that all of the I/O happens so fast. It's hard to believe that this is a low-end machine... Got a pretty good tour through the development labs, and can tell you that the 32-bit workstation is not a myth. Also saw some clever refinements of the desktop on the ST520. Atari is really trying to deliver on its promise of "power without the price" and I think they're going to pull it off... the ST520 is going to invigorate the drowsy marketplace."

According to Byte reporter Jerry Pournelle at COMDEX, the "story" of the giant computer show was the 520ST. Bruce Webster, Byte columnist, said on the Byte Information Exchange network (BIX): "In my January [1986] column, I picked the 520ST to be the big winner of 1986 because of its price/performance ratio."

In the January, 1986, issue of Byte, Ion Edwards, Phillip Robinson, and Brenda McLaughlin gave us their first impressions of the new 520ST: "For many years the public has equated the Atari name with arcade games and joyhsticks. In truth, the Atari 400/800/XL computer line is technically at least comparable if not better than other 8-bit machines, so it should not be a surprise tha the company's latest venture, the 520ST, is a competitive 68000 system. Indeed, we are most impressed with the clarity of the graphics, with the speed of the disk I/O (input/output), and with the 520ST's value."

Two months later, Byte magazine featured the new 1040 ST on its cover. In his editorial, Phil Lemmons comments: "The Atari 1040ST is one of the great milestones in personal computing. For the first time, we can buy a 16-bit machine with 1 megabyte of RAM, 720K bytes of floppy-disk storage, a good monitor, and a mouse, all for less than $1000. The operating system, TOS, is fully in ROM. Although screen memory and systems software make some demands on RAM, most of the megabyte really does belong to the programmer, and therefgore to the user. Give its price and power, the Atari 1040ST is the first personal computer that offers programmers the hardware resources needed to make the computer accessible, responsive, and useful to millions of nontechnical people who have yet to use computers."

Personal Computing says: "The 520ST is noticeably faster than the Macintosh, not only because of the faster clock rate, but also because it has a faster disk drive... The ST tops the Mac in screen resolution... The difference is noticeable and allows for more data to be neatly displayed on the screen... The molded plastic mouse works well... it's very smooth and just as easy to use as the Macintosh's mouse -- and better than the Amiga's."

The Jeffries Report, a respected industry newsletter, chose the ST over the Amiga and even the IBM PC in a head-to-head comparison:

"The big difference between the Atari ST and the Amiga are price and availability. A 512K Atari color ST at $995 costs about $1000 less than a similar Amiga configuration."

"If you study the Amiga chip design, it is obvious that they intended this to be a super fancy video game machine... That's the nub of the Amiga vs. Atari confrontation: Amiga was designed three years ago as a $700 hot video game home computer. When that market went south, they scratched their heads and decided to "reposition" their video game computer as a serious business computer. Good luck."

"An Atari ST with a fast 68000 processor, a whopping 512KB of RAM, a cute little 3.5 inch disk, excellent bit-mapped display, friendly GEM user interface, and CD-ROM 550 megabyte optical disk with an interactive encyclopedia sounds like exactly what the market needs. Contrast this to the Amiga, which costs about twice as much! Sure, up-scale Yuppie types may not care about the price difference of $1000 (if it costs more, it must be better, right?) but the vast majority of individuals and small businesses do care about price."

Jeff Markoff of the San Francisco Examiner: "The 520ST's readily apparent strong point is speed. Compared to the Macintosh, working with the ST is extraordinary."

And Family Computing adds: "With the impressive 520ST, Atari has delivered on its promise of "power without the price."

ST CONSUMER NOTES

What do consumers think of the ST? Here is a letter to Atari Explorer Magazine from Joseph D. Calo:

"As a soon to be owner of an Atari 520ST, I thought that I'd write and say that it's about time someone -- Jack Tramiel et al -- came out with a state of the art computer at an affordable price. I've already sold my Commodore 64 system and can't wait to get the 520 home early next year. It's a fantastic machine! I'm looking forward to using it as a word processor -- the major reason why I purchased a computer in the first place... Also, some of my friends have already sold or are selling their systems to purchase this unit. In fact, many that had planned to purchase the new Commodore 128 have changed their minds and have either already purchased or will be purchasing the 520 in the future. Thanks again to Jack and to all those who helped develop this excellent computer."

Here is a note from Steven Bubulsky that was posted on CompuServe:

"Well, I've had my ST for a month now, and was beginning to think that I might have made an error in not waiting for and buying an Amiga. Ah, victim of HYPE... I had a couple of hours with the Amiga today, and while the Amiga was good: nice graphics and all... It sure was not worth the price difference between it and a similar ST. I thought the Intuition system screens were 'messy' to look at; GEM on the ST is much more pleasant to look at and work with. The monitor output on the ST seems cleaner to me. The fabled Mandrill picture on the Amiga was impressive, but the flicker was distracting. All of the sudden, this Atari ST looks awfully nice to me. I think I'll take the extra $1100 I just realized that I saved and buy some nice software...and maybe a nice MIDI instrument to play with the ST. Nice work, Jack and Atari! I won't have to sleep with an inferiority complex."

What sort of people buy the ST? According to InfoWorld's research "its typical buyer is a veteran computer user ... Typical buyers have also been small business men and writers ... most of whom are trading up from a Commodore 64, Apple II, or even an IBM PC."

NO HOLDS BARRED COMPARISON

We are constantly asked to give a comparison between the ST and the competition. You asked for it, you've got it!

CPU SPEED: The ST uses the same 68000 microprocessor that is used in the Macintosh and Amiga computers, a far more powerful processor than the old 8-bit 6502 family of chips used in the Apple II series and the Commodore 64 and 128. In the ST, the 68000 processor runs at 8.01 million cycles per second (8.01 MHz). The Macintosh is second at 7.83 MHz, the Amiga next at 7.16 MHz, and the IBM PC/AT dead last at only 6.00 MHz. 8-bit computers like the Commodore 128 run at a only 2 MHz, the C64 at a mere 1 MHz.

MONOCHROME VIDEO DISPLAY: The ST can display 640 pixels per line and 400 lines in high resolution monochrome. The Macintosh displays 540 by 340, roughly two-thirds the number of pixels. The IBM PC/AT has a 640 by 200 display, only half the ST's resolution. The Amiga has no monochrome mode, nor does the Commodore 128. Because monochrome monitors do not have something called a shadow mask, a necessary evil in all color monitors, they produce a much sharper display that is far easier on the eyes.

COLOR VIDEO DISPLAY: The ST has two color modes, 640 by 200 resolution with four colors and 320 by 200 with 16 colors -- colors may be selected from the 512 that the ST can generate. Using a built-in feature called horizontal blank interrupts, all 512 colors can be displayed simultaneously in either mode. The Macintosh has no color capability. The IBM PC/AT has a 320 by 200 16 color mode (actually two shades of eight colors). The Amiga can go up to 640 by 400 with 16 colors using a flickering interlaced display, or 640 by 200 to get a stable picture with 32 colors.

SOUND AND MUSIC: The ST includes a 3-voice sound chip with a frequency range from 30Hz to beyond the 20KHz audible limit. It features an independent volume control for each channel, programmable envelope shaping (ADSR), and phasing capabilities similar to those of the SID chip in the Commodore 64 and 128. Although the ST's sound chip is not as capable as the sound chip in the Amiga, the ex-

tremely low price of the ST allows one to purchase it and an extremely sophisticated synthesizer (such as the Casio CZ101) for much less than the cost of an Amiga alone. Simply plug the synthesizer into the MIDI port on the ST and you've got sound that puts the sound capabilities of the Amiga or any other personal computer to shame.

FLOPPY DISK ACCESS: The ST's 3.5 inch disk drives transfer data to or from the 520ST at 31K bytes per second (over one hundred times faster than the Commodore 64's 300 bytes per second). The ST has been measured to access the disk between 40% and 50% faster than the IBM PC/AT. The disk speed is several times faster than the Amiga or the Macintosh. Both SS/DD and DS/DD drives are available for the ST with formatted storage capacities of 360K and 720K respectively.

HARD DISK ACCESS: The ST DMA port is capable of moving up to 1.33 million bytes of data per second -- this is so fast that there are currently no hard disks available that will transfer data at that rate! No other computer has a comparable port.

PRICE: The 520ST system retails for $795 with monochrome monitor or $995 with RGB color monitor. This price ôincludesÇ a 3.5 inch SS/DD disk drive (DS/DD optional), RGB monitor, 512K RAM, 192K ROM, Centronics parallel and RS232C serial ports, 128K ROM cartridge port, mouse and joystick ports, floppy disk controller, and MIDI interface. A comparable Amiga color system is $1995, including an extra 256K of RAM (to bring the RAM up to 512K) and an RGB color monitor, without any MIDI or cartridge ports. The Macintosh system (without color, of course) is over $2000, also without MIDI or cartridge ports. The IBM PC/AT system with bit-mapped color graphics and I/O ports is well over $3000. And a Commodore 128, while not even close in any respect to being in the 520ST's performance category, costs exactly the same amount as an ST; $899 with keyboard, 1902 monitor, and 1571 disk drive.

The 520ST system components can also be purchased separately. The 520ST keyboard, cpu, and mouse cost $299. The keyboard unit has both composite and RF modulated video outputs in addition to its RGB output, so it can use a normal TV set or composite monitor as a display. The SS/DD 3.5 inch disk drive costs an additional $199 and the RGB color and monochrome monitors -- not required if a TV set or composite monitor is to be used -- cost $399 and $199, respectively.

ST TECHNICAL FACTS

THE BEST TEXT DISPLAY ON ANY PERSONAL COMPUTER for practical applications is found on Atari's SM124 monitor. This high resolution monochrome monitor provides true 640 by 400 pixel resolution with astounding clarity using an Atari-exclusive video signal that refreshes the screen 70 times per second with a broader bandwidth signal than any other system. Other computers have to 'cheat' to get that kind of resolution, cutting down the screen refresh to only 30 times per second and delivering a picture with noticeable flicker. The ST's crisp image provides hours of comfortable viewing.

THE FASTEST INTERFACE ON ANY PERSONAL COMPUTER is the ST's hard disk port. This is actually a direct-memory-access (DMA) interface that provides data transfer rates at an unprecedented 1.33 million bytes per second for a variety of devices. In addition to the ST's optional 20 megabyte hard disk ($699), this port will simultaneously accommodate high performance add-ons like the CD-ROM, the planned 32-bit coprocessor, the IBM PC emulator, high-speed hard copy peripherals, and local area networks.

DESIGNED TO BRING THE FULL POWER OF THE CPU TO YOU. Of the major 68000 based systems (and we include Apple's Macintosh and Commodore's Amiga), the ST personal computer system is the only one that runs the cpu at its full 8 MHz. In addition, the system architecture of the ST ensures that the cpu can run constantly and is not bogged down by graphics, sound, or I/O processing. While it is claimed that the Amiga's cpu does not have to intervene when the machine manipulates graphics, what they don't tell you is that many graphics and blit operations effectively turn the cpu off -- the cpu doesn't intervene, it just goes to sleep! Technically, this is known as putting the cpu into a wait state. On the ST, the special video and I/O circuits give the cpu the ability to work during other operations. After all, what is a computer really used for -- processing (by the cpu) and communications with other devices (I/O), which is precisely where the ST's hardware shines -- it is much faster than even much more expensive machines like Apple's Lisa and IBM's PCs.

FOUR CUSTOM CHIPS ENHANCE THE ST'S CPU POWER. The DMA chip makes disk access to both floppy disk and hard disk port instantaneous as far as the cpu is concerned. The video shifter, memory manager, and "glue" chip work in concert to make sure the system timing is synchronized so that the graphics operations take no time from the cpu -- in fact, the ST RAM chips are operated twice as fast as the cpu can access them, so the video chips can access them between cpu accesses.

FINAL COMMENTS

Perhaps the best confirmation of the superior price/performance ratio of the 520ST comes from a major Commodore dealer. The following was downloaded from CompuServe's OnLine Today section on December 12, 1985: "In a letter to midwestern computer owners, a well-known Commodore retailer has blasted the manufacturer's marketing strategy. The retailer, Paul Orme of DigitalWorld, has decided to go on the offensive in explaining his firm's decision not to market the Amiga. According to Orme, Commodore is "afraid of letting us demonstrate it [the Amiga] next to the Atari 520ST." The president of the suburban Chicago store went on to explain that he wasn't all that impressed with the Amiga... Orme said that the Amiga compares poorly with the Atari and the new Epson Equity computer "dollar for dollar and feature for feature." To prove his point, Orme is setting up an Amiga machine "not to sell" but so that potential buyers can see what "Commodore itself, knew -- the Amiga is no match for the Atari."

ST UPDATE

by Joe Waters and Frank Sommers - CN

Where are the 1040s???? The first shipment of 500 computers, was sent via air. Unfortunately, the airplane stopped in the Phillipines at just the wrong time and that delayed the arrival somewhat. However, they did finally arrive in the states in late February. San Jose Computer, which received 20 1040s late on a Friday night (February 28th) sold 18 the next day and the remaining two were gone before the store officially opened on Sunday -- all at list price. The main shipment, 20,000 by boat, arrived in mid-March and are scheduled to be shipped out sometime during the week of the 17th. By the time you read this, they should be available even on the east coast.

There has been some confusion about the blitter chip and where it would or would not go. On the new 1040s, there is a socket for the chip. When the chip is introduced, you can just plug it in. On the 520s, there is no socket. The blitter chip must be installed by piggy-backing on the 68000 or by installing a daughter board in the 68000 socket with the 68000 and the blitter chip installed on the board.

How about the RF modulator? The new 520 STs have the RF modulator built in. The new 1040 STs do not. Both machines can be used with a composite video monitor as well as the standard Atari analog RGB monitor. The signal for the composite monitor is on the cable used to connect the color monitors. Of course, to send the signal to a composite monitor will require a home-made connector. I wonder what enterprising company is going to release that product!

The 20MB hard disk drives should also be shipping by the time you read this. Why the long delay? Two reasons. There were problems in the operating system particularly when there were more than 35 folders created. That bug, and others, have now been fixed. The second reason? The first shipment of plastic cases were not quite the right size! At this writing, price is still slated to be $799, although I understand Tramiel would prefer to release it at $699 if at all possible.

Where are the mass market STs? Haven't seen any yet. Still don't know if we ever will. Some of the Atari execs who were pushing the mass-market strategy are no longer at Atari. Seems Tramiel doesn't think a Toys-R-Us images goes hand-in-hand with a strong computer company. More likely strategy for the near future: release the IBM emulator and a system to allow networking STs together. This strengthens the STs position in the business market. Then shoot for ComputerLand and BusinessLand to be the ST mass marketeers. We'll see.

How about CD ROMs and the ST? Plans are, indeed, underway. Won't say anything this month, but look for more information in the May issue of CURRENT NOTES.

There are quite a few new ST products reaching the market. We will try and review the better programs and give detailed evaluations as time permits. However, in the meantime, we'll use some of this space every month to pass on some info about ST news and new products introduced for the ST.

IQ Peripherals Corp.,have evaluated the Macintosh, the Amiga, and the ST, and selected the ST as the basis for their low cost Unix workstation to be introduced later this year, noting that the price performance ratio of the ST was far superior to anything else on the market. According to Info World, the work stations, using Unix System V operating system will be able to connect with a variety of larger computers also running Unix. The graphics workstations will be half the cost of anything that exists at present.

Final Word, the powerful wordprocessor from Mark of the Unicorn, does not run on ST's which have had an upgrade with TOS chips installed in ROM. The division responsible for Final Word at Mark of the Unicorn had not been informed by their marketing division that any problem existed. As of mid-March they had no patch available to repair the bug.

Hippopotamus Software is releasing its 1st professional program for the ST, HippoConcept. The outliner program, will be reviewed in the next issue. It is a companion program for HippoWord, the other professional series program, which the company is delaying release of, until it can be made compatible with laser printers that will run on the ST.

Batteries Included has informed CURRENT NOTES PaperClip Elite for the ST will be displayed at the April Comdex. The company is reluctant to cite a release date, but is pointing for a June-July window. It will include a spell checker and you will be able to integrate DEGAS graphics right into the text.

Megamax C is receiving plus+plus initial reviews, as THE C for the ST. It is reported to be fast, one pass, with full K&R 'C', and stands a chance of becoming the most commonly used 'C' for Atari's new spaceship.

The word is about that those of you who have done your own 1 meg upgrades should exercise considerable caution when installing your 6 TOS in ROM chips. The installation is simple enough, opening up the computer, uncoupling the shielding, including two solder points, and then replacing the chips as indicated. But incidental static electricity discharges from whatever source can turn a well machine into a sick one. Those with the 1 meg upgrades are somewhat more vulnerable because of the ever present possibility of disturbing wiring required for the first upgrade, or jarring of other chips. Several owners have experienced "blown" powerpacks after performing both operations; and instances where the power source is still functioning, but putting out incorrect power. It would seem there is some argument for having the work done professionally.

Those of you who are using your computers to help make your monthly payments, on your computers, will be eager to see Artworks Software's two programs due out in May. ST Golf can be played for a profit with your friends, if you negotiate effectively on the 1st tee, and Strip

Poker can be played against a time-clock with the person earning the highest score in the agree on time period picking up the money in the middle of the table.

Softronics of Munich has a CP/M emulator in the working stage. It converts your ST into a CP/M machine. Purportedly it only needs to be wrapped up, but there is no time frame for its arrival here.

Those of you eager to write off your ST's by employing them directly in your stock transactions might best keep your eye on ISGUR Portfolio, Batteries Included's investment management program. It appears to be the earliest one over the horizon and should be in the stores at the same time this issue is.

Electronic Arts is producing for the ST. The arcade favorite Marble Madness is due shortly. Financial Cookbook, the 8-bit considerable success, is now out there, waiting to help you figure out whether to refinance your mortgage or not, along with 31 other financial transactions.

Mind Mine Atari Computer Center in Bellevue Washington has released MT-FORTH-83 ($49.95). This is a complete, ABSOLUTELY STANDARD 16-bit Forth-83 model, ported to the 520ST by the author of the original APX Extended fig-Forth. It is compatible with ALL TOS versions and memory sizes and includes a complete GEMDOS file I/O system, with words for graphics, mouse, sound, RS-232, MIDI, and clock I/O.

Mind Mine has also released a 512K expansion memory board for the 520ST that installs in the space where the missing RF modulator in early 520s would have been. No piggy back soldering is required. Anyone with a good working knowledge of electronics and familiarity with the necessary hand tools could complete the installation in 30 to 45 minutes. Call Lee Raphfeldt (206) 641-6138 for more details.

Activision has three great new adventures out for the ST. HACKER comes complete with no instructions. You're faced with a LOGON: and then left to fend for yourself (after all you ARE a hacker!). Borrowed Time and Mindshadow are both illustrated text adventures. "Suddenly it's 1934, and you're Sam Harlow, private eye. Nice guy, but somebody wants you dead. Guess who? Better yet, think. Think quick. Because you're living on BORROWED TIME." In MINDSHADOW you find yourself -- all alone -- on a mysterious tropical island. You have no idea how you got there or where you came from. You don't even know who you are! You must escape from this place armed only with your reasoning power and imagination.

ABACUS SOFTWARE continues to expand their ST Library with several new titles. ATARI ST FOR BEGINNERS -- an introductory book for the new ST owner. Step-by-step guide gives a fast start to this very capable computer ($16.95). ATARI ST PEEKS AND POKES -- a collection of quick-hitters for all ST users. Presents information about the GEM operating system, intelligent keyboard, disk files, input/output, pointers, more ($16.95). ATARI ST BASIC TRAINING GUIDE -- an introduction to programming using the ST BASIC language. Teaches problem analysis, flowcharts, variable types and other topics with dozens iof example programs and quizzes ($16.95). ATARI ST FROM BASIC TO C -- for the BASIC programmer who wants to learn the C language on the ST. Parallel examples demonstrate probramming techniques and constructs in BASIC and C ($19.95). PRESENTING THE ATARI ST -- a completely revised edition of our popular overview of the ST. Expanded coverage of the ST features and GEM interface ($16.95). These books are patterned after ABACUS's earlier titles for the Atari ST (ATARI ST INTERNALS and ATARI ST MACHINE LANGUAGE). For more information contact: Arnie Lee or Scott Slaughter, (616) 241-5510.

VERSASOFT has announced their relational dBASE compatible data base manager, dbMAN, for the Atari 520ST. Free FULL-FEATURED evaluation disks will be available through authorized dealers. (Also available in the CURRENT NOTES ST Library.) The introductory price, good until July 1, 1986 will be $99.95; suggested list after July 1 is $149.95. DBMAN will come with a 30-day money-back guarantee and NO COPY PROTECTION.

DBMAN, as with DBASE, is programmable, supports multiple index files, and up to 2 billion records per file. Unlike DBASE, however, DBMAN provides 10 active database files, virtually unlimited numbers of variables, and multiple parent-child relations. Menus can be created with a single command and the powerful debugger/editor lets you edit your program files while debugging, set break points, single step, or pause/resume execution of your program. For more information contact Richard Post (408) 268-6033.

Unison World, Inc. has introduced Print Master ($39.95) which has been receiving good reviews as an ST version of Print Shop. Program includes 8 fonts, 11 border effects, 111 ready-made graphics symbols, a graphics editor, text editor, and a preview mode.

The Mark Williams Company has released their first ST product: Let's Write ($80). This package consists of six utilities: the MicroEMACS screen editor; pr, a simple formatter; kermit, a communications utility; spell, a spelling checker and dictionary; epson, a printer driver; and nroff, a powerful formatter and formatting language. This program should allow any kind of formatting desired. I will test it out this coming month and see if it can be tailored to produce this newsletter.

If you are a Unix fan, you'll love Micro C-Shell by Beckemeyer Development Tools. This product takes you out of the GEM environment and puts you into a command line environment that is, nonetheless, still compatible with your GEM programs. Unix users will recognize the commands cat, cd, chmod, cp, echo, grep, head, history, lpr, ls, mkdir, more, mv, pr, pwd, rmdir, tail and wc. What good is all this? One simple example:"ls -R >lib.dat". This command would produce a listing of all your files (including all subdirectories and their files) and send the output to a file call "lib.dat" for you to then edit or print or do whatever you like. How would you accomplish that in GEM?

(Continued on page 23)

NEW PRODUCTS

By Jack Holtzhauer - WACUG

As usual, this column is devoted to new products for the 8-bit Atari actually appearing on dealer's shelves. Except where obvious, descriptions and claims are those provided by the manufacturer.

ATARI PROOFREADER, The Atari Corp, Sunnyvale, CA 94086 - $19.99

This new Atari release, for use with the original ATARIWRITER cartridge is, essentially, the spelling-checker module from Atari's new word processor -- ATARIWRITER PLUS. The package contains two disks -- the program disk and the dictionary disk, the latter containing some 36,000 of the more common English words.

Once loaded into memory, you can use PROOFREADER to page thru your document, checking your spelling against PROOFREADER'S dictionary. You can also dump a list of possible errors to printer, while you're off doing something more important. The program allows you to add your own personal dictionary of frequently used words and save it to disk for future use.

ATARI 65XE PERSONAL COMPUTER, The Atari Corp, Sunnyvale, CA 94086, $79.99

This new personal computer is the 130XE's little brother and the successor to the popular 800XL. Sporting 64K RAM, it is claimed to have all the features of the 130XE except the Enhanced Cartridge Interface (ECI) port.

SILENT BUTLER, The Atari Corp, Sunnyvale, CA 94086, priced at $27.99

Claims for this personal finance management program, first announced at the Winter CES in January 1985, include the ability to "maintain your income and tax records; balance up to three checking and savings accounts; remind you of birthdays, anniversaries, dates, and meetings; summarize your year-end tax status; provide instant updates of your financial status . . . SILENT BUTLER gives you a balanced budget and some peace of mind . . ." With the optional CHECKHOLDER ($6.95), SILENT BUTLER will even print your checks for you.

How well does this program live up to its claims? We'll try to have a review for you in next month's CURRENT NOTES.

THE MUSIC PAINTER, The Atari Corp, Sunnyvale, CA 94086, $19.99

According to the packaging blurbs, THE MUSIC PAINTER makes learning about music easy and fun. "Musical notes have never looked so colorful, or as easy to remember. The musical score is painted on the screen as it is played. And each note has its own color, sound and name . . ." The program comes with "over fifteen tunes . . . set your own tempo for the tune . . . make it a drum solo or a piano, violin and flute trio. You can make the notes long or short, play the music forwards or even backwards . . . You can take popular songs, transcribe them, and then save them for use later. Or you can compose your own songs and build a library of personal hits . . . a perfect program for family learning and entertainment."

SCREENS, The Soft Cellar, PO Box 16393, Rochester, NY 14616-0393, $19.95

How do you describe SCREENS? I've never seen anything quite like it before. I guess the best thing is to just steal the text from The Soft Cellar's ad in last month's CURRENT NOTES.

"SCREENS is an easy to learn, easy to use, all machine language utility designed to make windowing on the (8-bit) Atari fast and fun. Open windows on any display using standard BASIC commands. Select window position and size with pixel resolution. Print or input text anywhere in the window in whaever width, height, font and color you select. Each window scrolls and clears without affecting the display outside the defined window. Nine independent windows can be created, each with its own set of characteristics as described above . . . and more! Windows can be stored away in RAM, or on disk in a standard or compressed format. They can be retrieved and when redisplayed are automatically sized to fit the current window . . . "

And it works!!! You can even load a graphics screen into a pre-defined window! Produce charts with labels! The possibilities are unlimited! This programming utility, written by Joe Wrobel, the vice-president of an Atari users group centered in Rochester, is just the thing for the moderately proficient BASIC programmer who wants to ad some class to his efforts. The disk contains an AUTORUN.SYS file, the kernal of Joe's system, and a demo program. The accompanying 36-page manual leads the user through the BASIC code needed to design his own windows. If you can't find this product at your local retailer, write to the Soft Cellar at the address furnished above.

SUPERSCRIPT, Precision Software, Ltd., 6 Park Terrace, Worcester Park, Surrey KT4 7JZ, England, $69.99

This software import has been favorably reviewed in several stateside user groups' newsletters. It claims all the features we've come to expect in word processors for the ATARI: block cut-and-paste, insert and typeover modes, full search and replace capabilities, print preview. Formatting options include centering, justification, bold and underlined text, headers and footers, variable auto-page numbering, etc.
The program also provides a 240-column editing screen, macros, and math facilities, the latter including ". . .

an interactive calculator, row and column arithmetic, auto number storage, and column moving . . ." 128K computers have two text areas for separate documents; 64K computers can access only one text area. Claimed to support major printer types and "customizes to suit individual printing requirements". Complete with a built-in spelling checker (British spellings???)

ULTIMA IV - QUEST FOR THE AVATAR, Origin System, Inc., 340 Havey Road, Manchester, NH 03103

". . . Prepare yourself for a grand adventure: Ultima IV, sixteen times larger than Ultima III is a milestone in computer gaming. Lord British has produced a game to challenge, not only your physical and mental skills, but the true fabric of your character.

"The triad of Mondain, Minax and the hellspawn Exodus have been vanquished and peace reigns through the land of Britannia. Evil yet abounds, but in isolated pockets and in the hearts of men. A new age awaits the coming of one who conquers on all frontiers through the mastery of both magic and the use of force. Demons, dragons, and long-dead wizards still plague the countryside and must be destroyed. The seeker on the path of AVATAR will face hostile groups composed of mixed enemy types and will survive such encounters only by strategic use of weapons and terrain. Earthly victories over seemingly impossible odds lead to the final conflict, where the ultimate challenge, thy self, awaits . . ."

Features include two full game disks, front and back; full conversations with hundreds of characters; multiple range weapons; unified magic system of unmatched subtlety; dozens of combat screens; hundreds of individually designed dungeon chambers; dozens of shops to explore.

==========

SYNFILE (64K & 128K VERSIONS) AND THE DATE FIELD

By Jack Holtzhauer - WACUG

You say you've recently purchased a new 64K or 128K version of SYNFILE+ and your keyboard locks into graphics every once in a while? You say you're using a "DATE" field in your records? Therein may lay the problem.

If you are entering new records and not making a manual entry in the "DATE" field, your keyboard may lock into graphics when entering your 19th new record. The only escape is to re-boot. This program glitch is associated with SYNFILE'S auto-reindexing function and has been verified by Synapse/Broderbund. A fix is in the works. In the meantime, one fellow WACUGian is solving the problem by entering only seventeen new records per session.

MICRO LEAGUE BASEBALL

Reviewed by Kenn Lara - AURA

Even though baseball season is not quite here, you can still enjoy it on your computer. Atari users are fortunate in that several software companies publish baseball games for them. Micro League Sports Association has now joined the ranks by introducing Micro League Baseball. In last November's issue of CURRENT NOTES, I gave a review of Computer Baseball by SSI. Using that as a basis for comparison, I will now give an evaluation of Micro League Baseball, now to be referred to as MLB. Computer Baseball will be noted as CB.

MLB's packaging is very similar to CB's. The box size is small with colorful artwork ornamenting the front. Game features, along with a sample game screen, are printed on the back. Inside are two manuals, a protected game disk which includes includes numerous historical teams, two players' aid cards, and a customer response card. The first manual is the manager's rule and instruction book. The second has background information on teams found on the disk. In MLB the player's aid cards are thoughtfully laminated; in CB's they are not. An added bonus is a newsletter pulished by Micro League Sports Association; it contains pertinent news and game tips. Another desirable support product is an 800 phone number, which users in need of information may call. Now that is product support! I wish more software publishers would follow this lead.

After booting MLB, you are greeted with a text screen displaying three choices: demo game, play game, restart a saved game. If a choice is not made within a minute, then it will go into demo mode. After making a choice, a game can be played in three modes: human vs. human, computer vs. human, and computer vs. computer. As soon as a selection is completed, the choice of which teams shall play must be made. Lineups and starting pitchers are then chosen. For each team there are default settings for lineups and starting pitchers, which greatly decrease setup time.

MLB is regarded as a baseball simulation on the managerial level, as is CB; strategy and advanced planning are emphasized over arcade skills. Such a simulation is based on statistical probabilities. During a game, players give commands to batters and pitchers in how they should bat or pitch, respectively.

Defensive and offensive commands in MLB are a lot like CB, although the latter has more command choices. While on defense a manager may input ten possible commands; six are pitches and the rest are strategy commands. Pitches are fastball, curve, slider, pitchout, and changeup/off speed. The last pitch, as stated in a recent newsletter, is really the pitcher's specialty pitch; this of course varies with whoever is on the mound. Strategy commands include: in at the corners (1st & 3rd baseman play in), infield in (all four infielders), intentional walk, and see lineup or roster. As on defense, there are also ten commands for offense. A batter may swing away with runners being cautious, or attempt a sacrifice bunt. A hit and run is also possible along with telling a

baserunner to attempt a steal. The remaining commands can insert a pinch hitter or pinch runner, and look at the lineup or roster.

After commands have been entered the ball is pitched, with results graphically and textually displayed. Immediate results can be a hit or an out, but numerous actions may then ensue such as runs scoring or errors occurring. Graphically, MLB is superior to CB. A typical baseball field, players and fans included, is displayed in several colors instead of just two as in CB. The players, fans, and especially the ball, are well animated; the ball even casts a shadow! Players are seen sliding, fielding, and throwing. When there is a strike-out, infielders even throw the ball around the horn!

At various places an the game screen, the text is displayed via windows. They show who is batting, pitching, and waiting on deck. A larger window shows current game stats such as runs scored, hits, errors, and innings played. It is in text displays that CB is slightly better than MLB. MLB requires a disk access to show more than rudimentary stats on each player. CB, on the other hand, presents data such as baserunner's speed, batter's hitting average, and pitcher's ERA throughout the entire session.

Another advantage of CB over MLB is that it allows users to create teams and transfer players. This feature is already included in CB, but must be purchased for MLB in the form of the General Manager/Owner's Disk. Both CB and MLB can be used to play out an entire season or set up a league, but this requires purchasing utility disks. Both SSI and Micro League sell team data disks, so if you get tired of playing with the same old teams, you can always purchase new ones.

In terms of realism, MLB has an edge over CB. MLB's graphics are a sight to behold -- they give that "you are there" feel. Players look as if they are actually hitting, catching, and running. The sound, if somewhat primitive, also adds to the game's realistic flavor. Instead of character graphics found in CB, MLB has well-defined graphics and nice animation. One almost holds his breath as the ball carries into the outfield and wonders if it will be a homerun or a routine fly out. Again, I must state that the animation of the ball and players has to be seen to be believed. MLB has taken advantage of the Atari's special graphics capabilities, which in turn, makes MLB a visually exciting game.

Speaking of excitement, games in MLB can be very close and nerve-racking. The computer is a good opponent; it can and will out coach you if given a chance. It is as though it can read your mind. Many of my players have been thrown out stealing; many were caught on a pitch out! However, it does not take high percentage risks. I have, as a result, been able to beat the computer when I acted aggressively and got big innings. Unfortunately, this strategy is not perfect; rallies have been killed because of my over aggressiveness. Also, keep an eye on your starting pitchers. It's tempting to keep them in a full nine innings but as in real baseball, MLB pitchers will soon tire out and begin losing their "stuff". If a pitcher begins giving up hits, then it is time for your "stopper" quickly. As in the Majors, to consistently win requires knowledge and instinct to decide when it is time to take risks and when to be cautious.

In all games there are bound to be some weaknesses; MLB is not an exception. One weakness of MLB is command input. Commands are entered via keyboard as in CB. This may be fine for solataire play, but with two players, it can really slow a game down; players must crowd around the kayboard during the entire session. There is also a problem with relief pitcher. When an opponent sends in a relief pitcher, the offensive manager is not given a chance to send in another hitter if need be. I find it disenheartening to watch as my weak hitting left-handed batter takes on their ace lefty. I cannot even change a batting command in response to the pitching change! All I san do is watch and wait.

MLB lacks a few features found in CB, such as end-of-game stats and a printer option. MLB, at the end of each game, just displays runs scored, hits, errors, and innings played. In contrast, CB displays a complete box score. It also has the capability to print out ther box score and a team's individual stats. Of course, you can always do this by hand but it would be tedious and distracting.

In conclusion, I regard MLB and CB as good simulations of baseball srategy. They do a nice job in using stats to determine outcome, along with some randomness to add excitement. Graphically, MLB is much better than CB, but the latter has more features so there are tradeoffs between the two. However, CB is beginning to show its age as games like MLB combine stats and sophisticated graphics into highly playable games. I highly recommend MLB to any and all baseball aficiandos. Major League Baseball can be found for under $30 at many places, team disks for about $16.

LOOK AT YOUR LABEL

The first line of your mailing label has some valuable information. You will see a four-digit code in the form YYMM such as 8610. This means that your membership/subscription ENDS in the 10th month of 1986, i.e. the October issue is the last one you will receive.

To help members remember to RENEW, I have added the phrase "RENEW NOW" for all members whose membership expires next month. The phrase "LAST ISSUE" means you had better renew quickly or you will not receive the next issue of CURRENT NOTES.

EXCHANGE EDITORS

If you are receiving CURRENT NOTES as part of our user-group exchange policy, please be sure to see that the members of your club see the newsletter. We have subscribers from almost every state in the union and some of your club members may wish to subscribe directly. Subscription information can be found on page 46.

N O V A T A R I
NORTHERN VIRGINIA USERS GROUP

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Bulletin Board	ARMUDIC	569-8305

Special Interest Groups

BEGINNERS SIG	Gary Purinton	476-8391
ST SIG	Evan Wallace	620-9144
TELECOM SIG	Dick Knisely	476-0529

NOTICE: APRIL MEETING
has been changed to the
3RD SUNDAY -- APRIL 20th

NOVATARI MAIN Meeting is held at the Washington Gas Light Building, 6801 Industrial Road, Springfield, VA (normally the 2nd Sunday of the month). Take 495 to East on Braddock (620) to South on Backlick (617). Left on Industrial Road (by a light with a Texaco station on the corner). Washington Gas Light is the second building on the right (big parking lot, go right in front door). Our speaker for the April meeting will be Jim Heard on hardware expansions for the Ataris.

Big Auditorium

5:30 - 6:30	BEGINNERS SIG -introductory telecom
6:30 - 7:30	Demos (Library, games & productivity)
7:30 - 8:00	Business / Annoucements
8:00 - 8:30	Open Forum

Small Auditorium

5:30 - 6:00	TELECOM SIG
6:00 - 7:00	ST SIG

(ST SIG also meets at Washington Gas Light from 6:30 - 9:30 on the fourth Sunday of the month April 27th).

"SCREENS" by Joe Mrobel (c)1986

Now your 8-bit ATARI™ can have real windows, and it's easy when you use

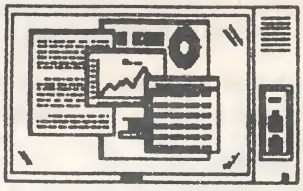
SCREENS

SCREENS is an easy to learn, easy to use, all machine language utility designed to make windowing on the ATARI fast and fun.

Open windows on any display using standard BASIC commands. Select window position and size with pixel resolution.

Print or input text anywhere in the window in whatever width, height, font and color you select. Each window scrolls and clears without effecting the display outside the defined window.

Nine independent windows can be created, each with its own set of characteristics as described above...and more!



Windows can be stored away in RAM or on disk in a standard or compressed format. They can be retrieved and when redisplayed are automatically sized to fit the current window.

The SCREENS diskette and detailed manual are only $19.95. NY state residents must add 7% sales tax. To order please send your check or money order to

The Soft Cellar

P.O. Box 16393
Rochester, NY 14616

---> LOCAL NOVATARI CHAPTERS <---

BURKE meets at the Oaks Community Center from 7:30 - 9:30 on the third Sunday of each month. Contact Ray Cwalina (250-3856).

GREENBRIAR meets at 4112 Majestic Lane, Greenbriar VA from 7:30 - 9:30 on the fourth Wednesday of each month (April 23rd). Contact Jim Stevenson (378-4093).

MT VERNON / HYBLA VALLEY now forming. Contact Ron Peters at 780-0963.

RESTON meets in the Reston Library from 7:00 - 9:00 on the last Wednesday of each month (April 30th). Contact Bob Zimmon (476-5924).

STERLING meets in the Sterling Community Center Annex from 7:30 - 10:00 on the first Thursday of the month (April 3rd & May 1st).

VIENNA meets in room 32 at the Vienna Elementary School from 7:30 - 9:30 on the third Wednesday of the month (April 16th). Contact Dave Heagy.

NOVATARI membership Dues are $15/year which includes a subscription to CURRENT NOTES and access to ARMUDIC. You may join at the main meeting, any chapter meeting or by sending $15, payable to NOVATARI, to Earl Lilley, 821 Ninovan Road SE, Vienna, VA 22180.

President's Report. It is time to get some initial organization and planning done for NOVATARI's ATARIFEST '86. What needs to be done in the next couple of months is firm up a date and place. Tentatively I would like to shoot for the Saturday of Veteran's Day Weekend. Those interested in helping should contact Terry White or me (Ed Seward).

In April we (NOVATARI) plan to establish the first WAACE BBS. The initial setup will be with an 520ST, two 314 drives and one phone line. The first upgrade will be for a hard disk and the second will, hopefully, be a second phone line.

Unlike ARMUDIC this BBS will not be free. The annual fee for WAACE members will be $10/year (since NOVATARI is footing the bill, we will only charge NOVATARI members $5/year). All fees/dues paid to the board will be used for maintenance and upgrades. Until the first hard disk is added to the system, I would like to limit the files to those for ST's. This should help lighten the load on ARMUDIC.

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Library Report. There are five new disks in the library.

GAMES 10. (Text Adventure #3)"High School Confidential" set at Handley High in Winchester, VA."Mad House" and "Death World" are the same as the ANTIC PD "Interactive Fiction", but have the NOVATARI Menu and Help Documentation added.

GAMES 11. "SURF'S UP!", Copyrighted PD boot disk. The back side has DOS and documentation program that gives one the choice of sending the documentation to the printer or the screen (P: or E:).

DEMOS 2. IPS Moviemaker "Clips". This is the same as ANTIC PD "Mini-Film Festival" except that "Happy New Year" has been replaced by Jim Stevenson Jr's "Opus".

DEMOS 3. "Heavy Metal Art" with "Fun With Art" loader as collected by JACE (Jacksonville, Florida).

LANGUAGE 9. ACTION! Disk #5. The fifth disk of ACTION! source files including the source code for "FADE" the "Star Wars" type of text effect.

LANGUAGE 10 (Coming in May): ACTION! Disk #6. This disk will contain the ACTION! source code necessary for "KERM850.COM" and "KERM1030.COM". It will also include the files TERM.ACT, TERM1.ACT and TERM2.ACT which form a bare bones terminal program by Clinton Parker.

A U R A
ATARI USERS REGIONAL ASSOCIATION

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CURRENT NOTES Liason	Rochelle Follender....	(301) 530-0243

Meetings are held on the first Thursday of every month, 7:00 pm (Library Activities), 7:30-9:00 pm (Program) in the Temple Israel Social Hall. Temple Israel is located in Silver Spring, at 420 E. University Boulevard, between Colesville Road (Route 29) and Piney Branch Road (Route 320).

Membership Dues are $15/year which includes a subscription to CURRENT NOTES. You may join at any meeting or by mailing your check, payable to AURA, to Treasurer, AUREA, PO Box 7761, Silver Spring, MD 20907.

AURA Presents...

"ATARIFEST 86"

SAT. MAY 31,1986 10AM-3:30PM

HOLY CROSS SCHOOL AUDITORIUM

4900 STRATHMORE AVENUE

KENSINGTON, MARYLAND

(DETAILS TO FOLLOW)

MAY MEETING will be 2nd Thursday rather than 1st Thursday. This is to avoid conflict with religious observances at Temple Israel.

MEMBERSHIP. AURA is presently carrying in excess of 150 members. This represents steady growth, which is very satisfying. Approxmately 120 members were on hand for the March meeting.

GUEST. Irv Feinberg of the Jersey Atari Computer Society invited AURA members to a special meeting on April 15. THe meeting will featutre Sig Hartmann and Leonard Tramiel of Atari. The company will demonstarte the products to be sown at the Hannover (Germany) Trade Fair. It is hoped that this will provide an opportunity for candid interaction with top Atari management.

VICE PRESIDENT's REPORT. Bill Schadt demonstrated a very simple sentence forming program that is driven through the joystick port of any 8-bit Atari. Bill has experimented with the use of this program by people who are seriously crippled and unable to use a nomal word processing program.

TREASURER's REPORT. Richard Stoll read off names of people who will be dropped from the rolls if their accounts are not settled immediately. Your CURRENT NOTES address label gives the month and year of the last issue that you will receive. Please renew promptly by sending the renewal form and your check to the AURA Post Office Box. Please pay by check whenever possible because cash payments are much harder to keep track of.

DISK LIBRARIAN. The long awaited Math Disc was released at the March Meeting. This brings AURA's disk catalogue up to 66 entries (not including ANTIC disks). Arrangements are being made to market some of AURA's better back issues through the WAACE mail order system.

APRIL MEETING PROGRAM. We have not had a feature presentation in a long while. We are negotiating for a demonstration of CAD software for the ST at our April meeting. Other potential topics include a discussion of KERMIT, one of the best Public Domain programs in ACTION!, and a tutorial on Atari graphics. Please let us know what you would like to see.

ATARIFEST '86. AURA is completing arrangements for the Spring Edition of ATARIFEST '86, to be held on 31 May at Holy Cross School, 4900 Strathmore Ave, Kensington, MD. Keep your eye on Current Notes for more details.

EQUIPMENT. Scott Klein has been authorized to use his good offices to procure an addtional TV set to make viewing easier at our meetings.

PRODUCT REVIEWS. Response to Bill Fry's project to compile reviews of products for the Atari has been lukewarm to date. Please support this worthwhile project by submitting your Pats and Pans.

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Membership.....	Gerald Whitmore.....	(301) 459-6164
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Tape Librarian.....	Bruce Ingalls.....	(703) 430-5287

Meetings are held on the third Tuesday of every month, from 5:30 - 8:30 pm, in room 543 at the National Science Foundation offices, 1800 G. Street, NW, Washington, DC. The closest subway stop is Farragut West, on the Blue and Orange lines. Take the 18th Street exit, and walk south (against the flow of traffic) down 19th Street for three blocks to G street. The building, on the corner of 18th and G, can be identified by a sign for the Madison National Bank on the corner. The front entrance is on the west side of 18th street, between F and G.

Membership Dues are $15/year which includes a subscription to CURRENT NOTES. Join at the meeting or by sending a check, payable to National Capital Atari Users' Group, to Allen Lerman, 14905 Waterway Drive, Rockville, MD 20853.

W A C U G
WOODBRIDGE ATARI COMPUTER USERS' GROUP

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Treasurer.....	Curt Pieritz.....	(703) 494-3704
Librarian.....	Arnie Turk.....	(703) 670-2547
Past President.....	Jack Holtzhauer.....	(703) 670-6475

Meetings are held, usually, on the third Tuesday of the month from 7:00-10:00 pm in the Community Room, Potomac Branch, Prince William County Library, Opitz Blvd., Woodbridge, VA. Exact dates: Apr 15, May 20, Jun 17. Entering Woodbridge from either North or South on Route #1, proceed to the intersection of ROute #1 and Opitz Blvd. (adjacent to Woodbridge Lincoln-Mercury). Turn west on Opitz and take first left turn into the library's parking lot. The Community Room is located to your left immediately upon entering the main building.

Membership fee is $10/year plus $1 monthly dues which includes a subscription to CURRENT NOTES for members in good standing. Join at any meeting or send check, payable to WACUG, to Bill ALger, 7792 Newington Woods Drive, Springfield, VA 22153.

C P M
CAPITAL PRO MICRO-USERS

President.....	Bob Kelly.....	(301) 839-6397
VP-Finances.....	Frank Jones.....	(301) 593-1056
VP-Communications.	Mike Abramowitz.	(301) 983-2363
VP-Prog.Affairs...	Joe Catterino...	(301) 757-1329
Disk Library.....	Joe Barbano.....	(301) 464-0757
Sysop/RBBS.....	Frank Huband....	(703) 276-8342

CPM Meetings. Capital Pro Micro-Users meetings are held at the Public Library in Oxon Hill, Maryland. The Library is located near the Woodrow Wilson Bridge just off the Washington beltway. From Virginia via the Woodrow Wilson Bridge, stay on the beltway to Maryland exit #4 West (St. Barnabas Road). St. Barnabas Road merges with Oxon Hill Rd. (right turn at end of exit ramp); proceed 1/4 mile and Library will be on your left. The meetings are held each month in the MEETING ROOM. The Library telephone number is 301-839-2400.

MARCH Meeting. The next meeting is scheduled for MARCH 25, 1986 at 6:30 p.m. CPM meetings are now held in larger quarters, the MEETING ROOM within the library.

Frank Jones plans to demonstrate the use line processors an interesting form of word processor. This one form of program that may be of use to all.Word processors are one the first programs that an individual will use with their computer.

At the February meeting, Joe Catterino demonstrated several different programs for the Atari 520 The vivid enhanced graphics of the ST had to be seen to be appreciated.Programs demonstrated included BRATACCAS by PSYGNOSIS Limited, from Liverpool England.Clayton Walnum reviews this program at length in the April issue of Analog.

Membership Dues. Member dues ($3) for 1986 and the subscription fee ($12) to CURRENT NOTES are past due. Deduct $1.00 for every month you are late in subscribing to CURRENT NOTES. Please ease the Treasurer's time requirements by submitting your payments ASAP. Remember, it is a voluntary position and that we have a new Treasurer. Mail your $15 to: Frank Jones, 416 Hillsboro Drive, Silver Spring, Md. - 20902.

Elections. The selection of candidates for new club officers is complete except for the President's position. The nominees approved at the January meeting were: Frank Jones as V.P. Finances, Joe Catterino - V.P. Program Affairs, Mike Abramowitz - V.P. Communications, and Joe Barbano as Disk Librarian.

The election of the new President has been postponed for three months (April) to facilitate a smooth transition for the newly elected CPM officers.

Library Disks. The CPM library currently consists of 18 cp/m 2.2 disks and all ANALOG disks from issues #20 thru #38. Library and ANALOG disks are available for purchase at monthly meetings. The cost of each disk is $3.00 plus $1.50 shipping for each two (2) disks or fraction thereof ordered by mail. Please allow two weeks for processing mail orders. Mail orders should be addressed to:

Mr. Joe Barbano, Disk Librarian, 3600 Earlston Court, Mitchellville, MD. 20716. Make checks for library disks payable to: Capital Pro Micro-users.

F A C E
FREDERICK ATARI COMPUTER ENTHUSIASTS

President	Mike Kerwin	(301) 845-4477
Vice President	Bill Austin	(304) 263-1867
Treasurer	Buddy Smallwood	(301) 432-6863
Librarian	Bob Martin	(301) 848-7619
Secretary	John Maschmeier	(301) 271-2470
SYSOP	Sam Yu	(301) 662-5586
FACE BBS		(301) 694-8983

Meetings are held on the fourth Tuesday of each month from 7:00 pm to 9:30 pm in Walkersville High School, MD Route 194, one mile north of MD Route 26 (Liberty Road).

Membership Dues are $20/year per family and include a subscription to CURRENT NOTES. Join at the meeting or send your check, payable to FACE, to Buddy Smallwood, PO Box 300, Keedysville, MD 21756.

February Meeting. At the February meeting, we had a short business meeting to consider some administrative matters, and we had nominations for club officers for the March election. Most of the incumbents were nominated, and all nominees accepted. The election in March should be rather short.

We then had a demonstration of VOICEMASTER by Jim Walker. He bought it to develop some voice controls for a computer so he could do things without being interupted to go to the keyboard. The unit could be taught to recognize various words and commands, and it was voice (person) selective. It would also record music, humming, or whistling, and play it back (and the music could be edited.)

Dan Shawen also demonstrated a homemade income tax template for SYNCALC which included Federal and Maryland state forms. He also gave us a short demonstration of KARATEKA. It is challenging as a game, but could be modified so the hero never dies. Dan also showed us a version in which the hero gets stronger whenever the bad guy kicks him. That was very innovative.

S M A U G
SOUTHERN MARYLAND ATARI USERS' GROUP

President	Sam Schrinar	(301) 843-7916
Secretary	Dorothy Leonardi	(301) 839-1363
Treasurer	Bob Barnett	(301) 934-2617
Disk Librarian	Jim Sanner	(301) 884-5840

Meetings are held on the second Thursday of each month at 7:30 pm in the John Hanson Middle School in Waldorf, MD. Take MD Route #5, proceed about 1/2 mile East of the intersection of Route 301 and take the first left past the Kinney shoe store to the school.

Membership Dues are $15/year which includes a subscription to CURRENT NOTES. Join at any meeting or send your check, payable to SMAUG, to Bob Barnett, P.O. Box 612, Waldorf, MD 20601.

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W.A.A.C.E. MEMBERSHIP SURVEY

This survey will be supply information to allow the clubs and CURRENT NOTES to better meet readers' needs. More importantly, it will supply critical data on one of the largest markets in the US. Please invest a few minutes of your time. The survey questions are listed below and the analysis of the results will be published in the June Atari Scuttlebits column. Mail your completed survey to: Bob Kielly, c/o CN Survey, 8309 Bella Vista Terrace, Fort Washington, MD 20744. Please take your time - as they say garbage in equals garbage out.

1. Age _____
A. 0 -18_____
B. 19-25_____
C. 26-35_____
D. 36-55_____
E. 56 + _____

2. Income _____
A. Student_____
B. Under $20,000_____
C. $20-$35,000_____
D. $35-$55,000_____
E. $55,00 +_____

3. Employment _____
A. Federal Government_____
B. State/local gov't_____
C. Small business_____
D. Corporation_____

4. How many years have you been with present employer? _____

5. Present Home System:
- o Computer (800, XL, 130XE, ST): _____
- o Printer (name): _____
- o Disk Drives (number): _____
- o Monitor (Y/N): _____
- o Modem (name, baud): _____
- o ATR8000 (Y/N): _____
- o No. calls/month with modem? Business _____ Pleasure _____
- o Total number of disks in library: _____
- o List 3 most frequently used software programs: _____
_____
- o List your home computers in the order you purchased them:
1)_____ 2)_____ 3)_____ 4)_____
- o Model of non-Atari computer you own (if any):_____
- o Approx. purchase price of home hardware (nearest $100)_____

6. Computer System at Work:
- o If same as above, check here: _____ None at work: _____
- o Mainframe, mini, or micro? _____Model:_____
- o Operating System (MSDOS, CPM, UNIX, etc): _____
- o Modem (name, baud): _____
- o Three most frequently used software programs:_____
_____

7. Future Purchases for Home:
- o Atari (520/1040 ST or 130XE): _____
- o Disk drive(s), (number): _____ Hard drive.(y/n) _____
- o Modem (name, baud):_____
- o Printer (name, dot/daisy):_____
- o Other computer equipment purchases (IBM, etc.): _____
_____
- o Next Three Software purchases: _____
_____
- o Approximate monthly expenditure for software $_____
- o Your software source? (local store, mail order, friend)_____

8. Please list your favorite: Computer Magazine_____
Local store:_____ Mail order:_____

9. Primary reason you choose Atari (check one): A: Price_____
B. Performance_____ C. Salesman _____ D. Friend _____

10. Programming
- o Do you program (y/n)_____ Favorite Language_____
- o What new language would you like to learn?_____

Club Officers: Please duplicate and have this form available at your meetings to help get as large a response as possible.

W A A C E Disk Library

Price for WAACE members (i.e. anyone who subscribes to CURRENT NOTES) is $3.00/disk plus $1.00 for postage and handling for every 3 disks. If you are not a member of WAACE, cost is a flat $5.00/disk (includes postage and handling). Send checks, payable to NOVATARI, to M. Evan Brooks, 4008 Patricia Street, Annandale, VA 22003.

GAME DISKS

1-Text Adventures (Crash Dive!, Adventure in the 5th Dimension, Kidnapped, Operation Sabotage)
2-Gambling (Black Jack, Five Card Stud, Gambler's Dozen, Progressive Jackpot, Poker Squares)
3-Simulations (Broadway, Civil War, Dairy Farming, Dark Horse, Kingdom)
4-Mazes (Dragon Maze, Hidden Maze, Caves of Ice, The Halls of the Leprechaun King, Maze Maniac, Master Maze & more...)
5-Parlor Games (Othello, Battleship, Monopoly, Mille Bornes, Yhatzee, Simon, Solitaire)
6-Graphics (Engineer, Night Flyer, Oil Piazza Hotel, Retrofire, Titan)
7-ACTION! Games (Rats Revenge, Warp Attack, Birds, Angle Worms, GEM, Snails, Pong, Break Out, Bounce Fun) NOTE: these DO NOT require the ACTION! cartridge.
8-Arcade Look-A-Likes (Pac Attack, Livewire, Maniac, Burgers & more ...)
9-Text Adventures #2 (Dr. Livingston, Titanic, Treasure Island, and Werewolf)
10-Text Adventures #3 (High School Confidential, Mad House, Death World)
11-SURF'S UP! (Copyrighted Public Domain boot disk with some Beach Boys Music)

TELECOMMUNICATIONS DISKS

1-850 Interface (AMODEM Plus v4.4, AMODEM Plus XL v2.5, AUTODIAL, TSCOPE, plus several documentation files)
2-835/1030 Modem (AMODEM - 3 versions, TSCOPE, DISKLINK, handlers and documentation for all programs)
3-MPP Modem (AMODEM Plus v1.6, AMODEM XL, MPP File converters, R-Handler, MSCOPE and documentation)
4-AMODEM 7.2 (Works with all popular modems, many bells and whistles, handlers and complete documentation included)

EDUCATION DISK

1-Mathematics (Drill, Function, Line, Math Kids, Math Fractions, Math Quiz, Math Time, Multiply)

MUSIC DISKS

1-TV/Movie Themes (AMS I - Cheers, The Entertainer, Ewok Celebration, Knight Rider, Raiders of the Lost Ark)
2-Rock (AMS I - Beat-It, Eye of the Tiger, Thriller, Still Rock'n Roll to Me & more...)
3-Jazz (AMS II - In The Mood, Satin Doll, Take 5, Muskrat Rag, Soda Rag, City Lights, Atrain, Southern Nights, Ghostbusters, We Are The World)
4-BASIC Music Programs (Star Spangled Banner, Flight of the Bumble Bee, The Entertainer, Darktow Strutter's Ball, Handel's Messiah, Mr. Sandman, Bibbidi Bobbidi Do)

LANGUAGE DISKS

1-fig-FORTH version 1.1 (Includes FORTH language, assembler, debugger, editor and complete documentation files)
2-ACTION source code for Rats Revenge, Warp Attack, Angle Worms, GEM, Snails, Pong) - GAME DISK #7
3-ACTION! Graphic Demos (14 Graphic Demos, 13 of them in source code, FADE.COM is without source code)
4-ACTION! Utility Programs (8 files to aid the ACTION! programmer, most from Clinton Parker's BBS)
5-ACTION! Modules #1 (Assortment of approximately 30 general purpose modules that you can include in your programs)
6-ACTION! Modules #2 (Similar to Modules #1, includes PICPASTE a cut & paste graphics program)
7-BASIC XL REF-BASE (A minature database manager built with BASIC XL.
8-ACTION! Disk #5 (Includes the source code for FADE ,"Star Wars" text, FORK.ACT to allow simulated concurrent processing, CHAIN.ACT to chain ACTION! programs and PSPIC3.ACT the Print Shop utility.)
9*ACTION! Disk #6 TELECOM (The ACTION! source code for the KERMIT terminal program by John Palevich, TERM.ACT a bare bones terminal program by Clinton Parker and SAMTERM.ACT) (coming in May)
10*ACTION! Disk #7 (Games source code) (coming in May)

UTILITY DISKS

1-Misc. Utilities (Cassette to Disk, Sector Examiner, Make AUTORUN.SYS and more...)
2-Printer (Banner Generator, Cross-Reference Lister, Disk Directory Printer, ATASCII Lister Program, Mailing List Program, Screen Dump and more...)
3-DOS 2.5 (DOS.SYS, DUP.SYS, RAMDISK.COM, COPY32.COM, DISKFIX.COM, SETUP.COM, DOS25.DOC)
4-Relational Data Base Management System (Provides the BASIC routines you need to buld your own database aplication)
5-Graphics Trilogy by Tim Kilby (AMUCE, char editor; BIP, graphic drawing prog; MMPC, build Display List mods)
6-COPYMATE 130 (Sector copier for 130XE. Copies an entire disk in 1 pass, multiple copies without rereading the orig)
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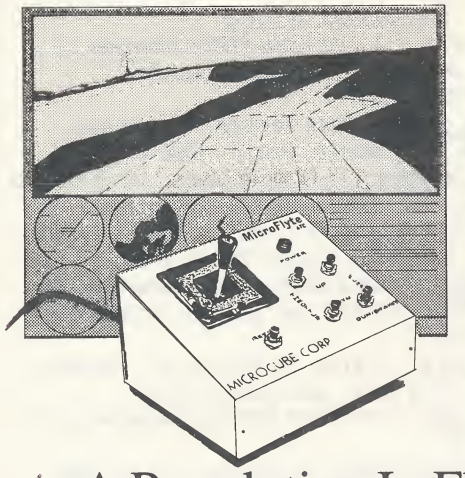
Club Librarians: Submit any disks you wish to add to the WAACE library to M. Evan Brooks. Any disks listed here are available to all WAACE clubs.



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13	14 Ads DUE	15 WACUG NCAUG	16 Vienna	17	18	19
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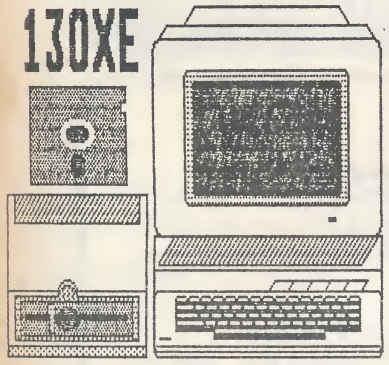

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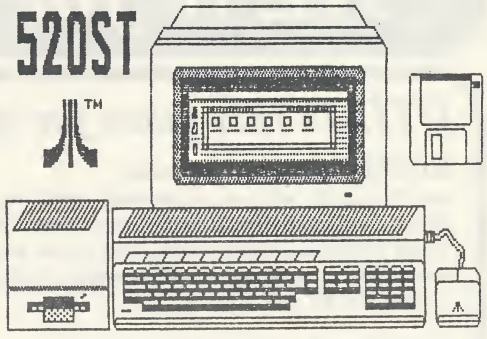

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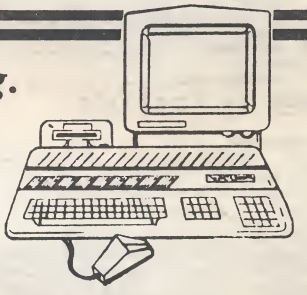

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